

## AMENDMENTS TO THE CLAIMS

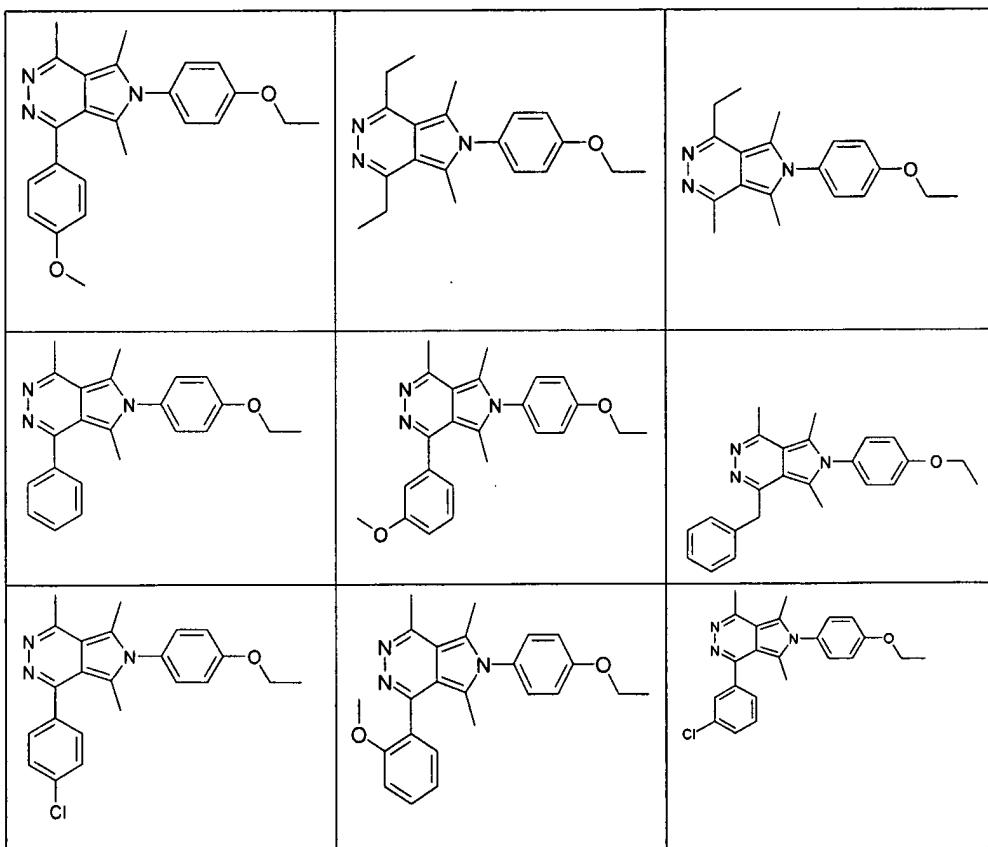
This listing of claims will replace all prior versions, and listing of claims in the application.

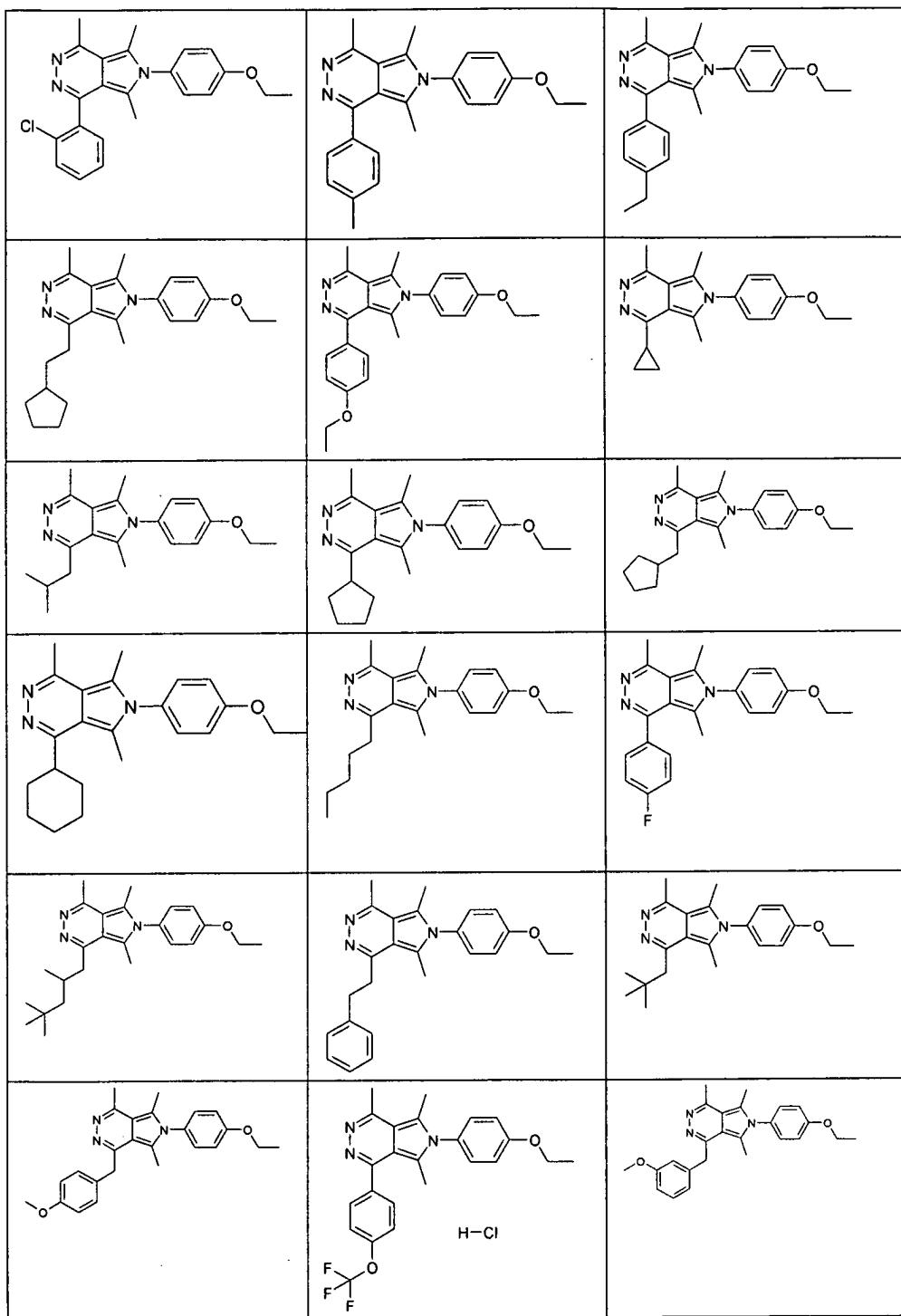
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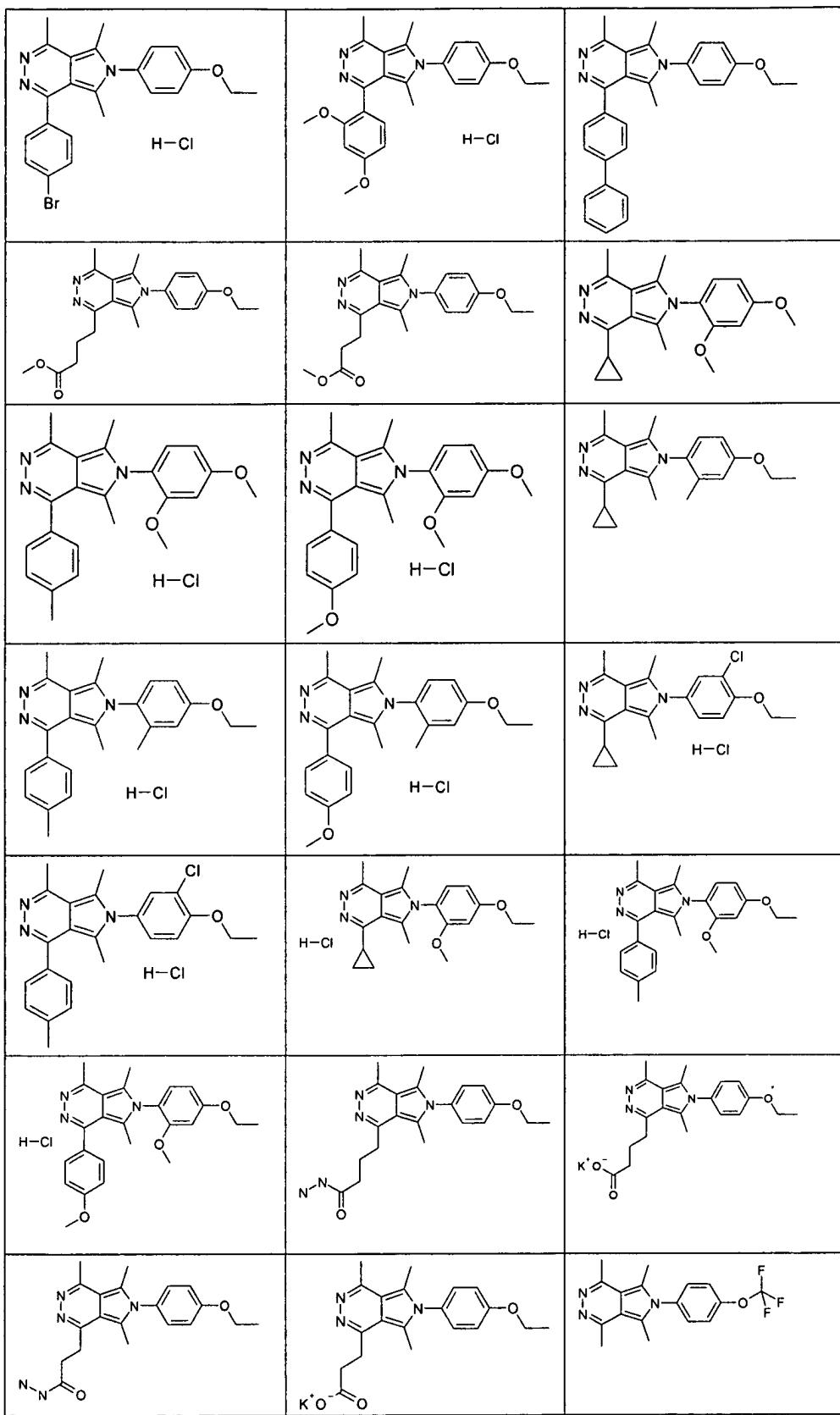
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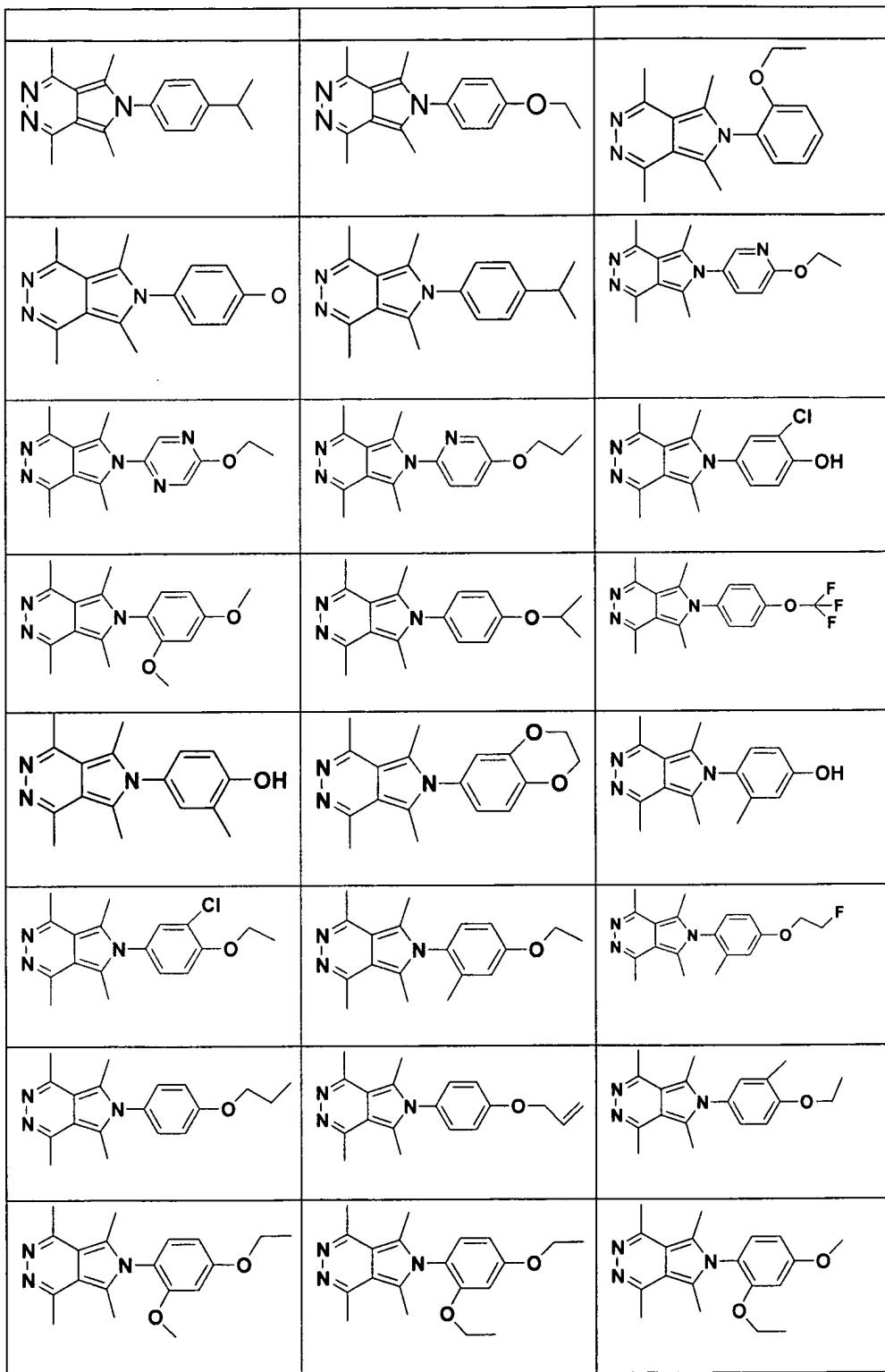
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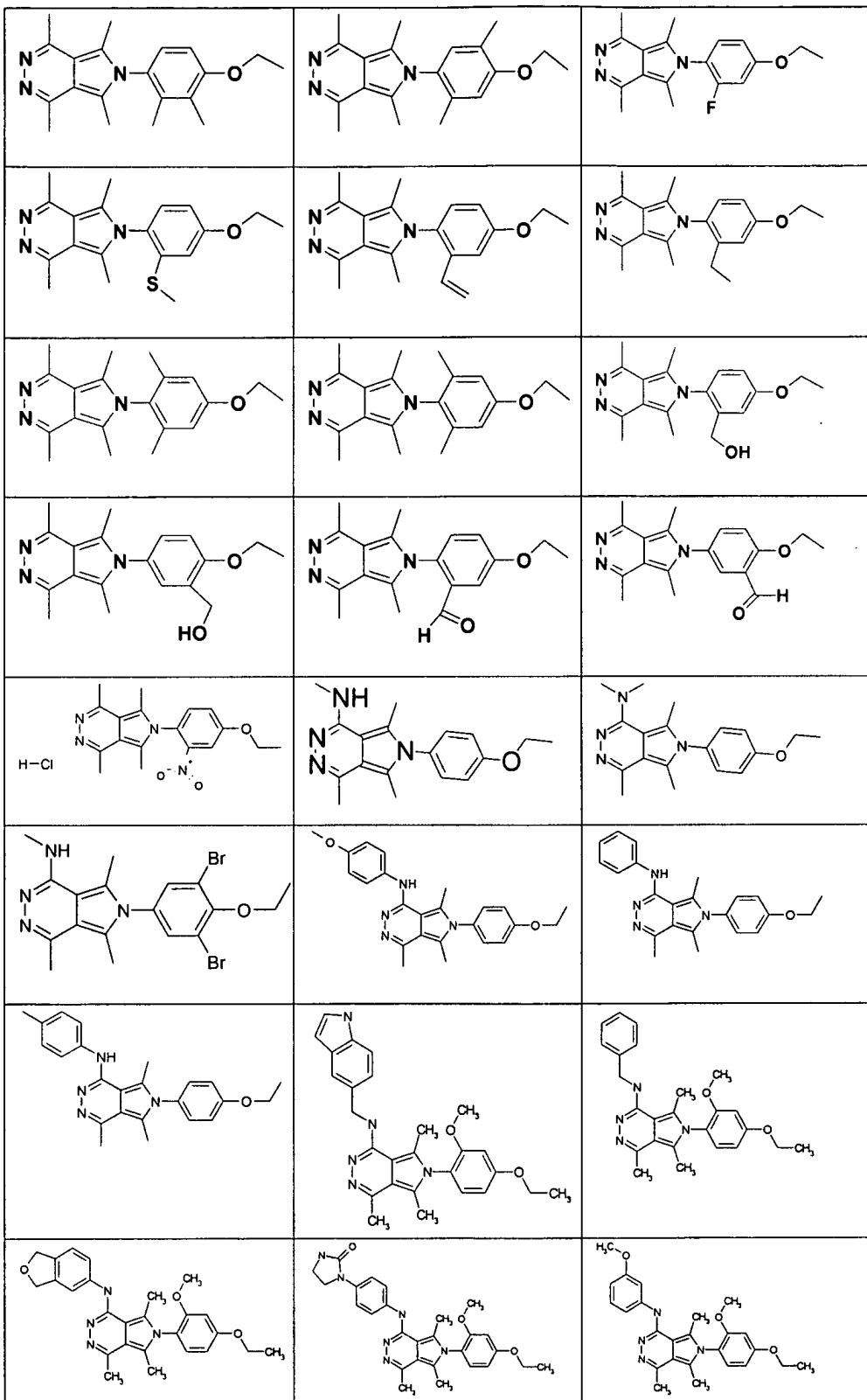
4(Currently Amended). A method of binding the  $\alpha_2\delta$  subunit of voltage gated calcium channels comprising a step of administering to a patient in need thereof an effective amount of a compound represented by Formula (I) selected from: The method according to Claim 1, wherein the compound is selected from:

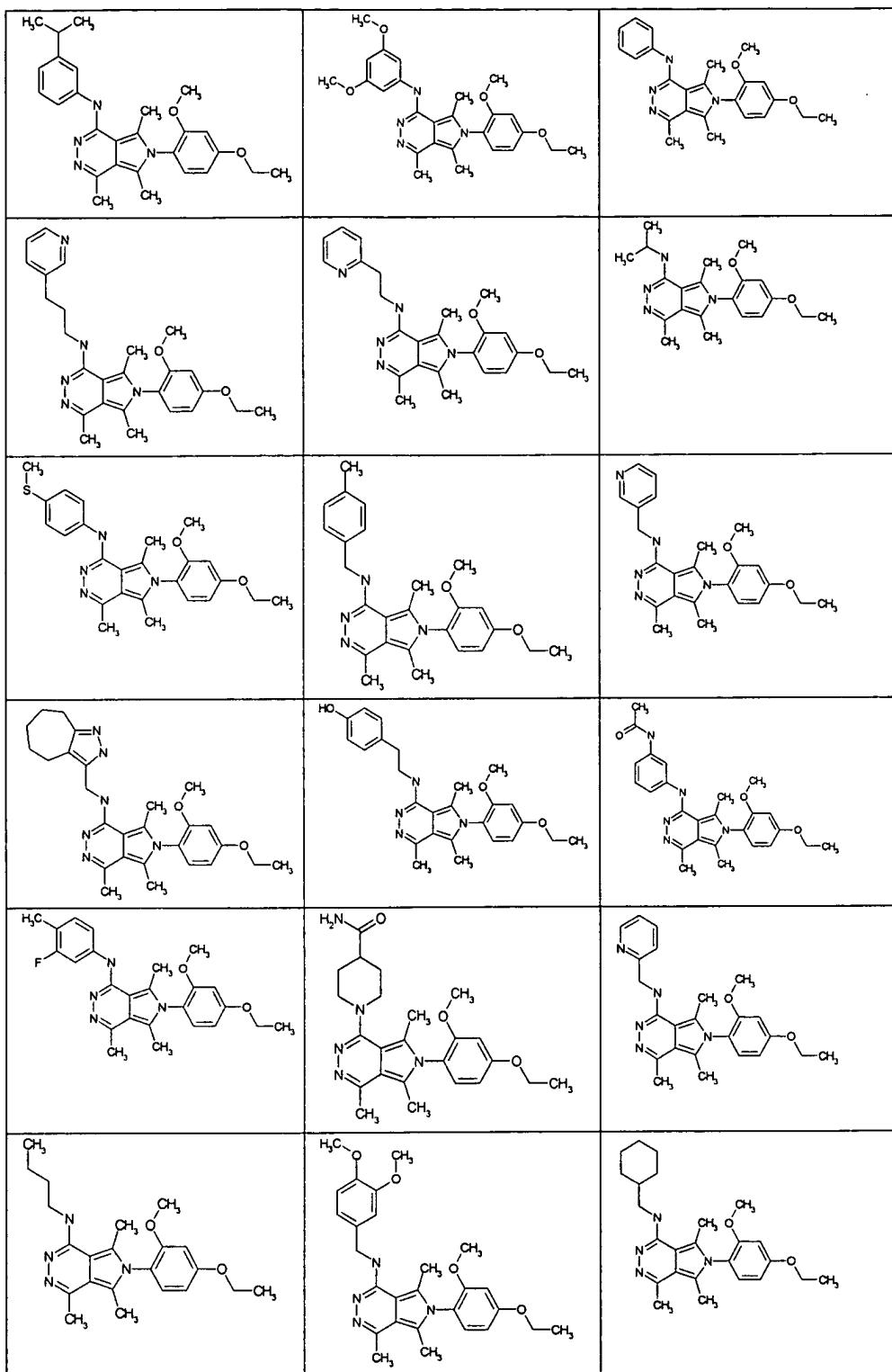


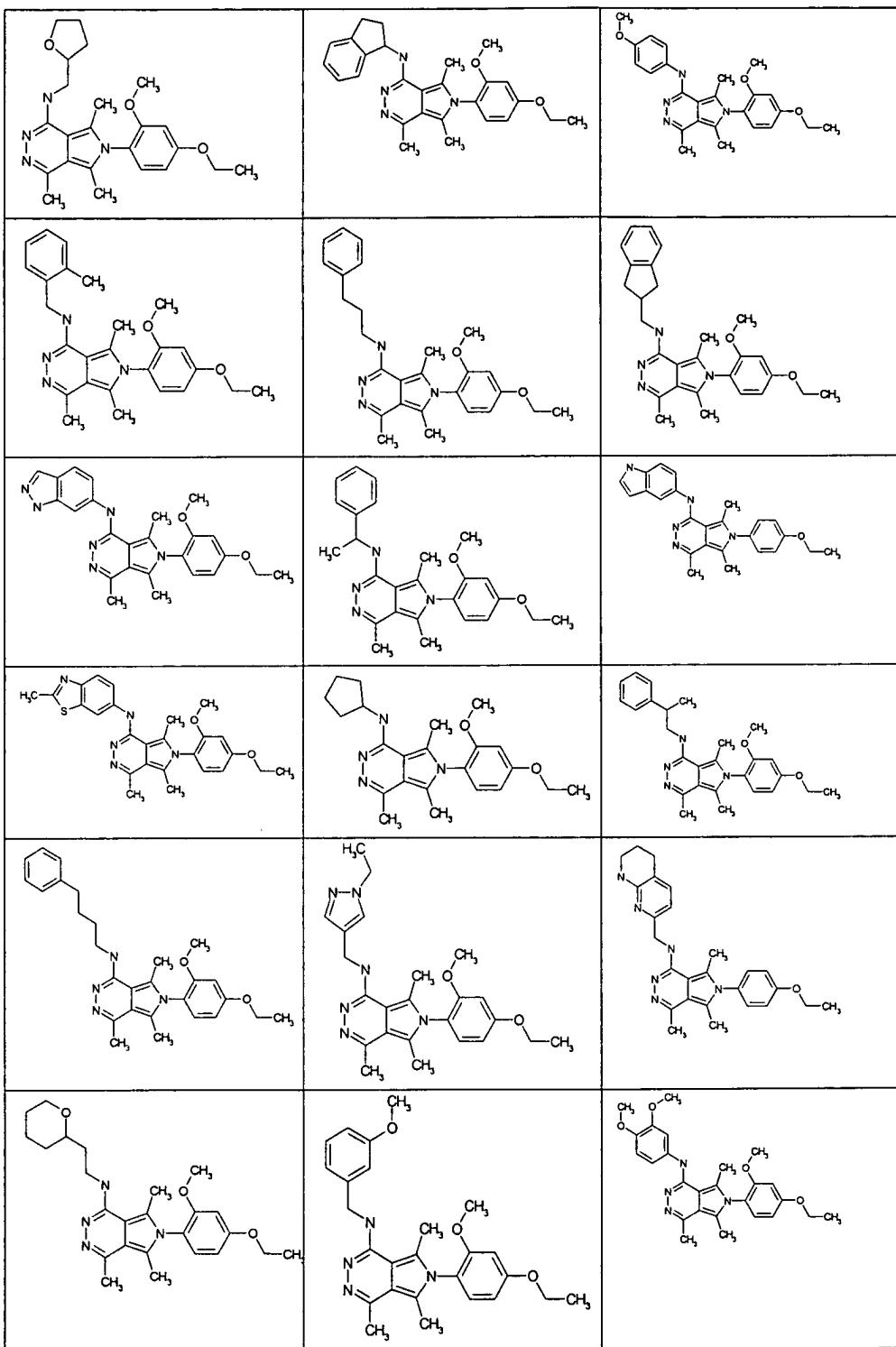


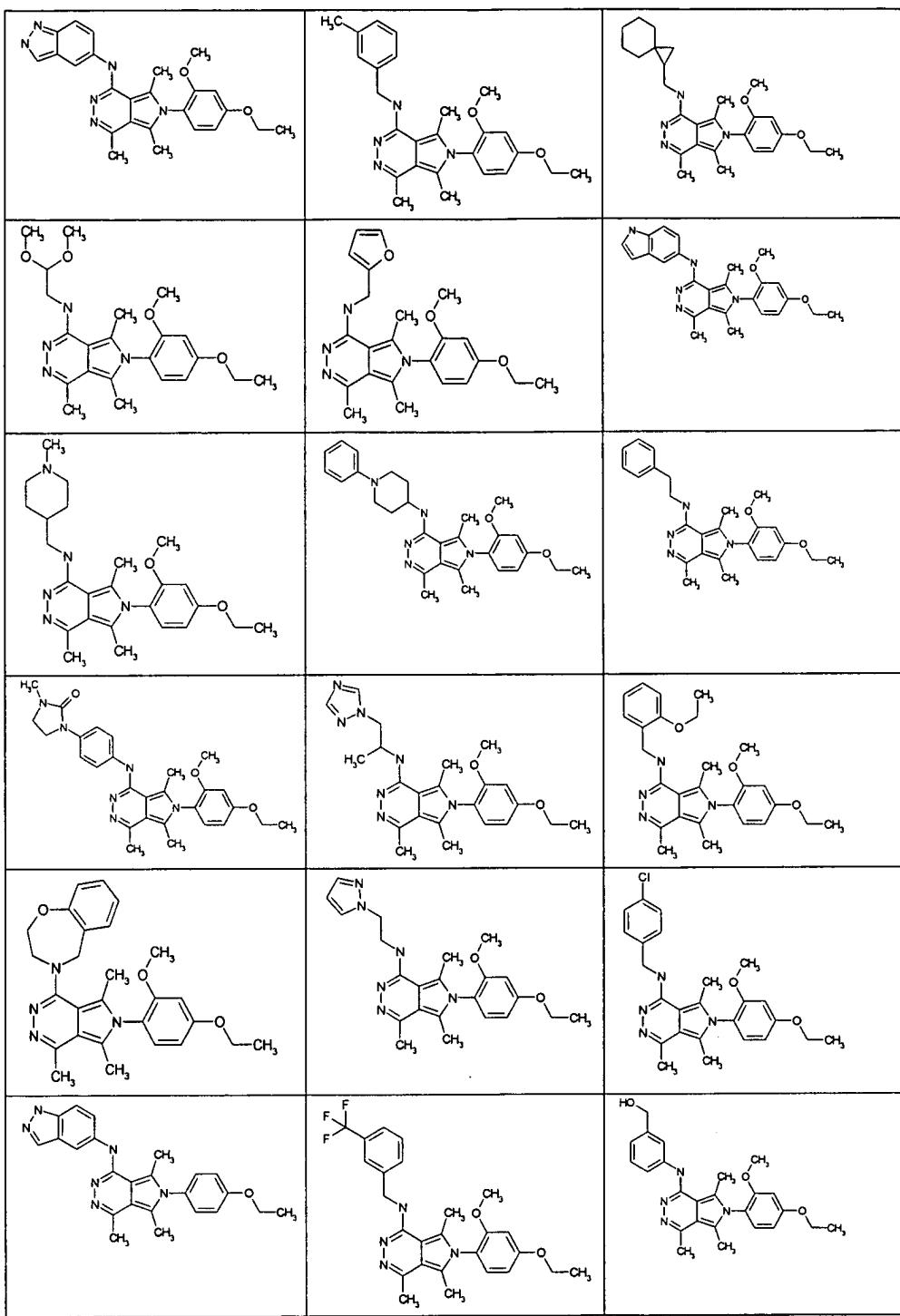


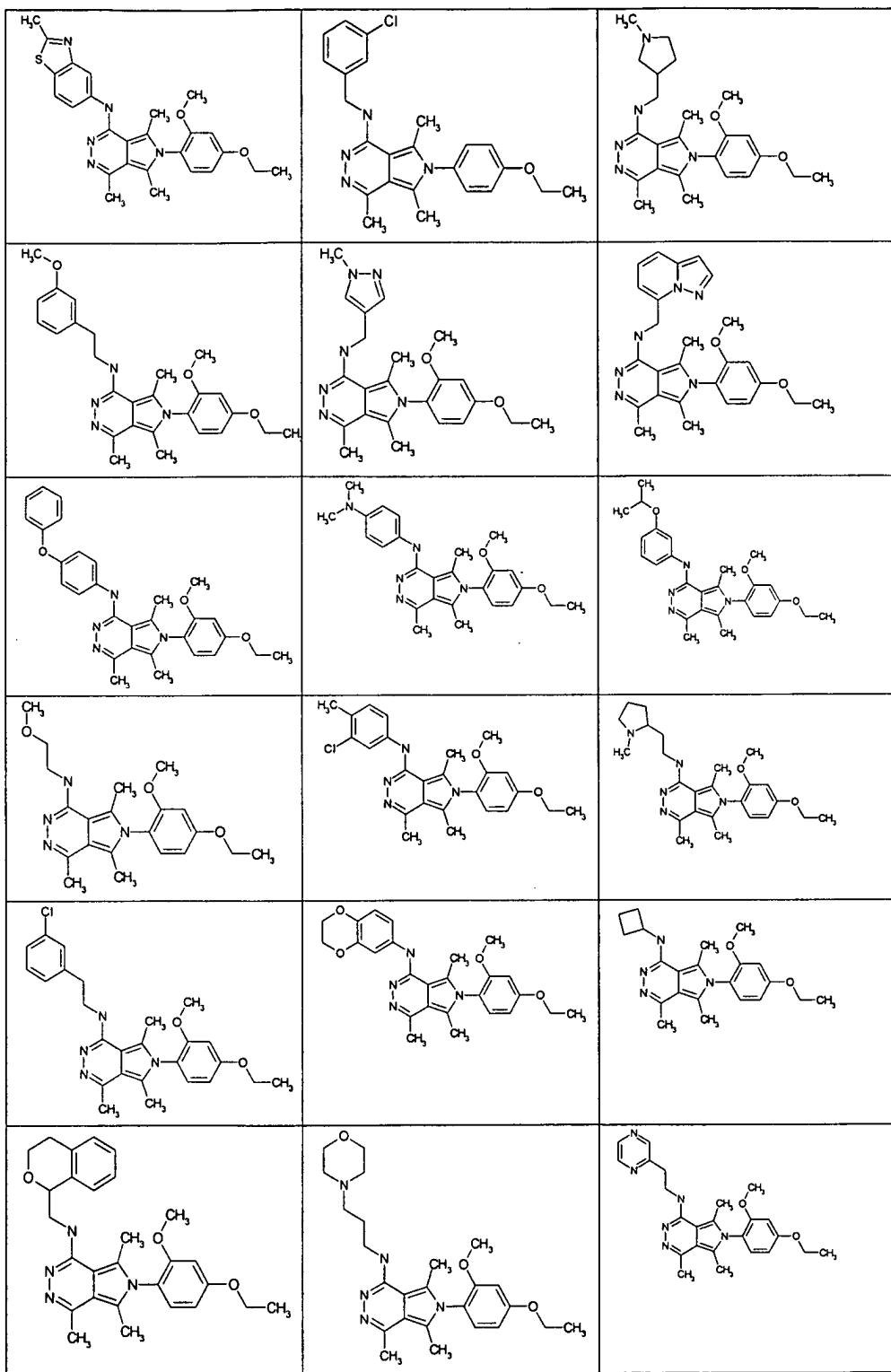


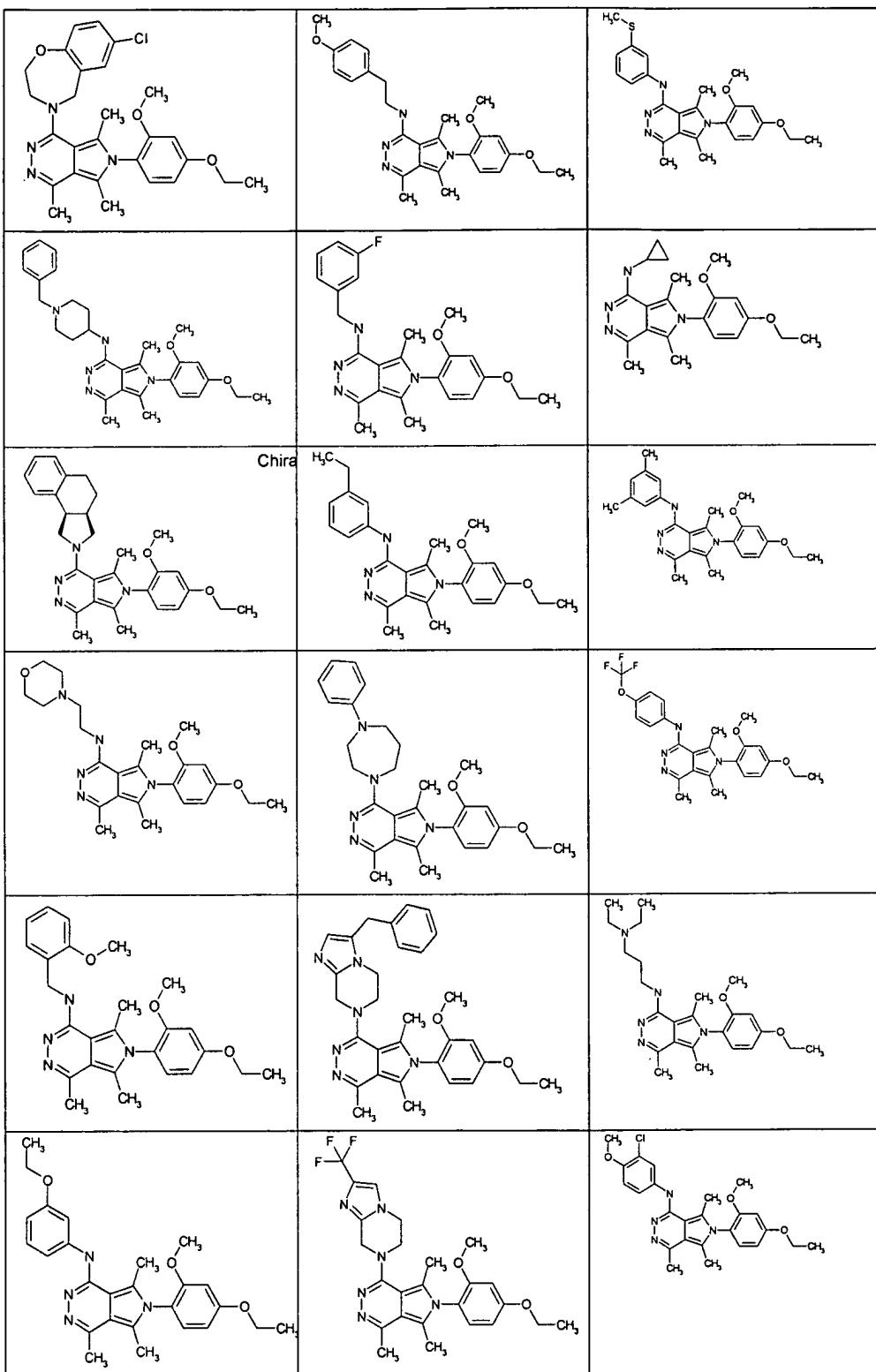


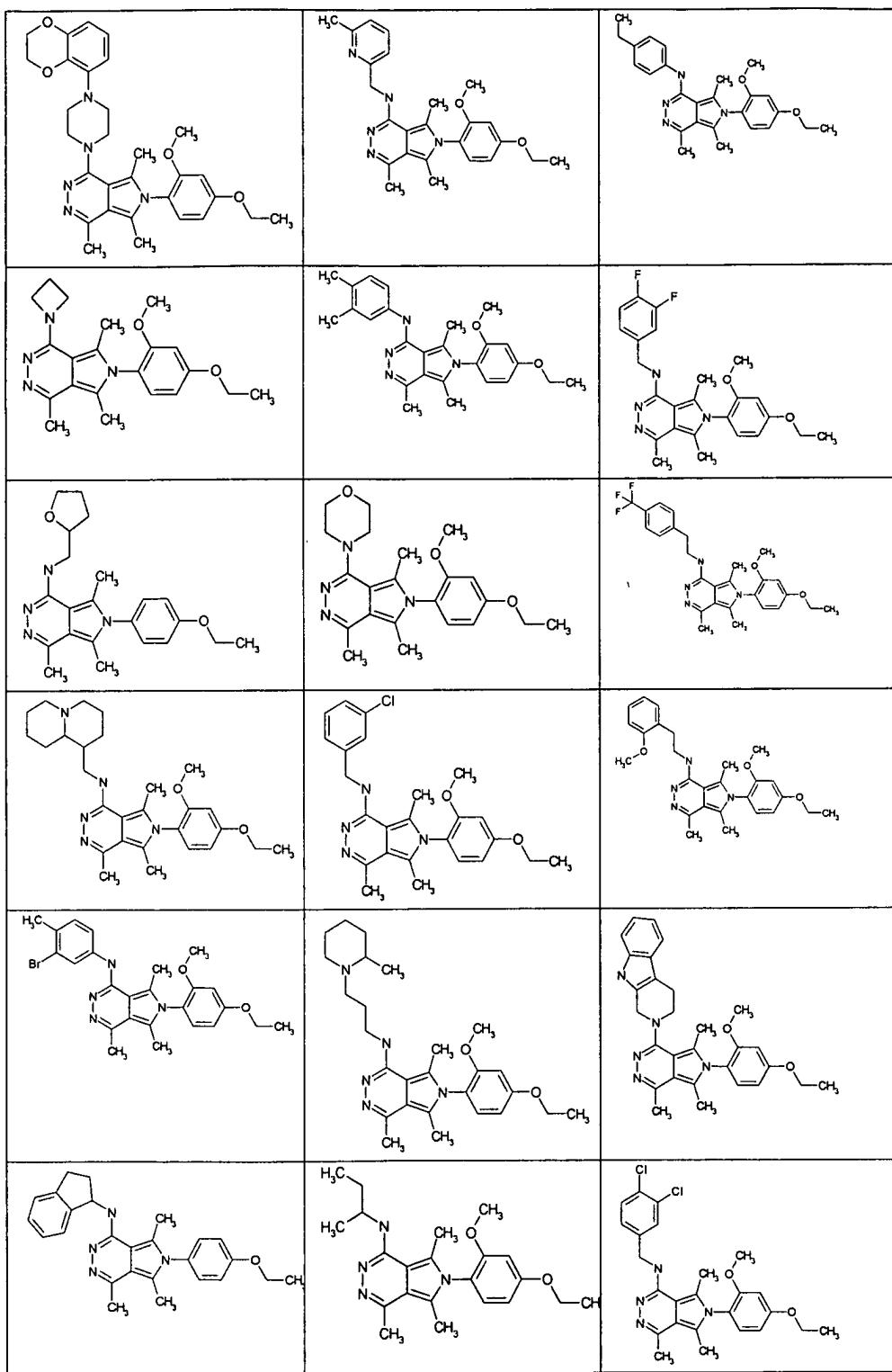


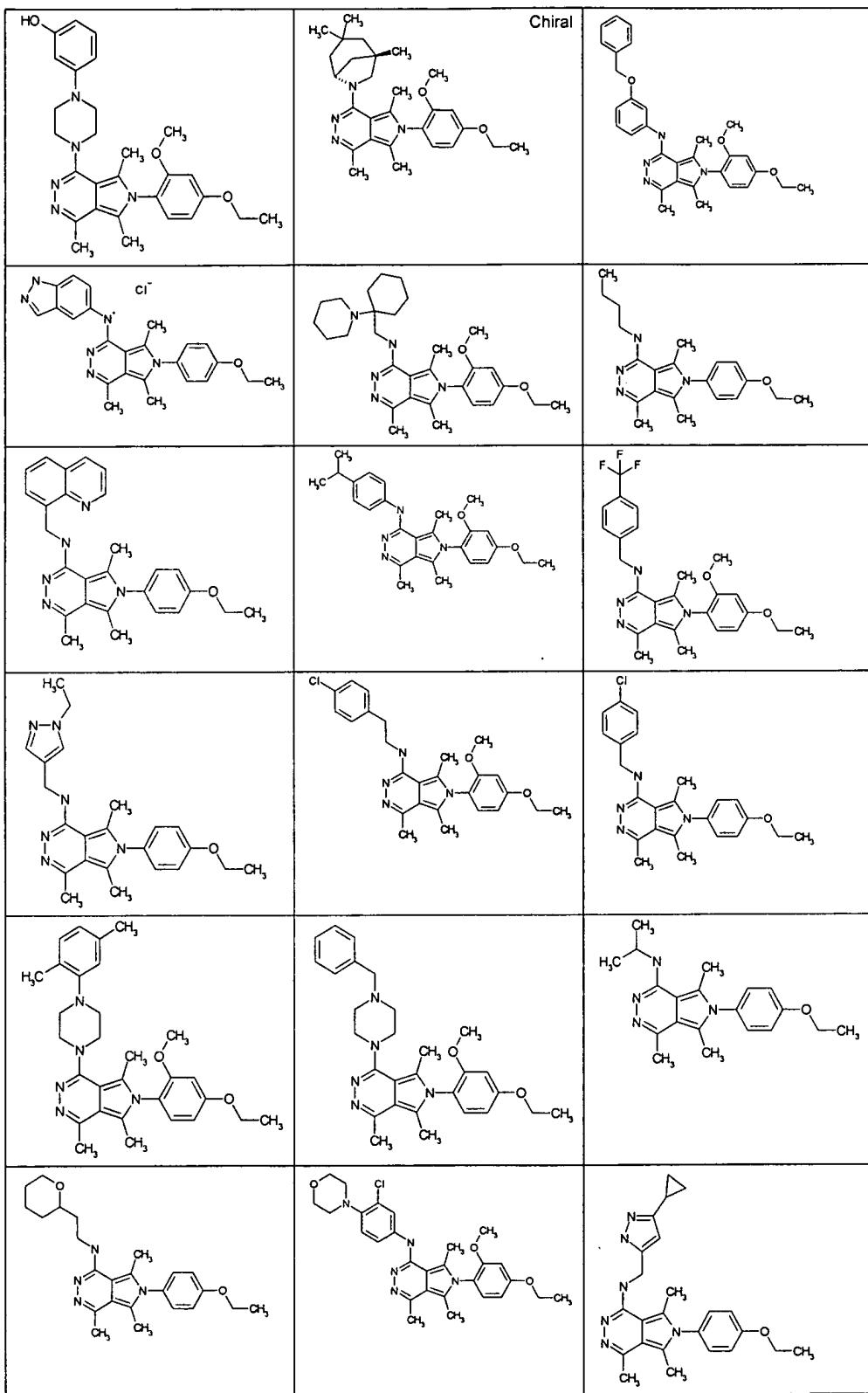


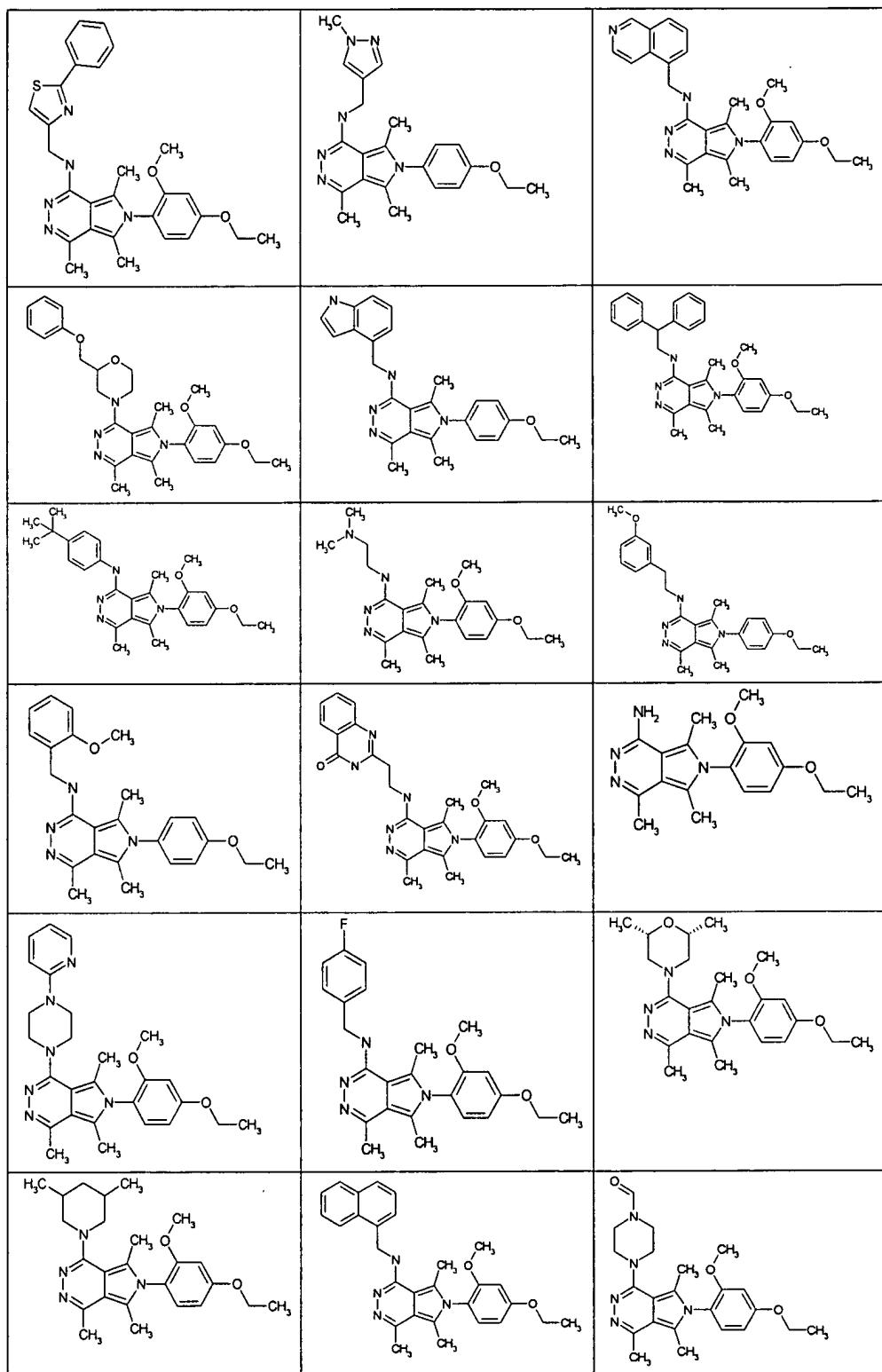


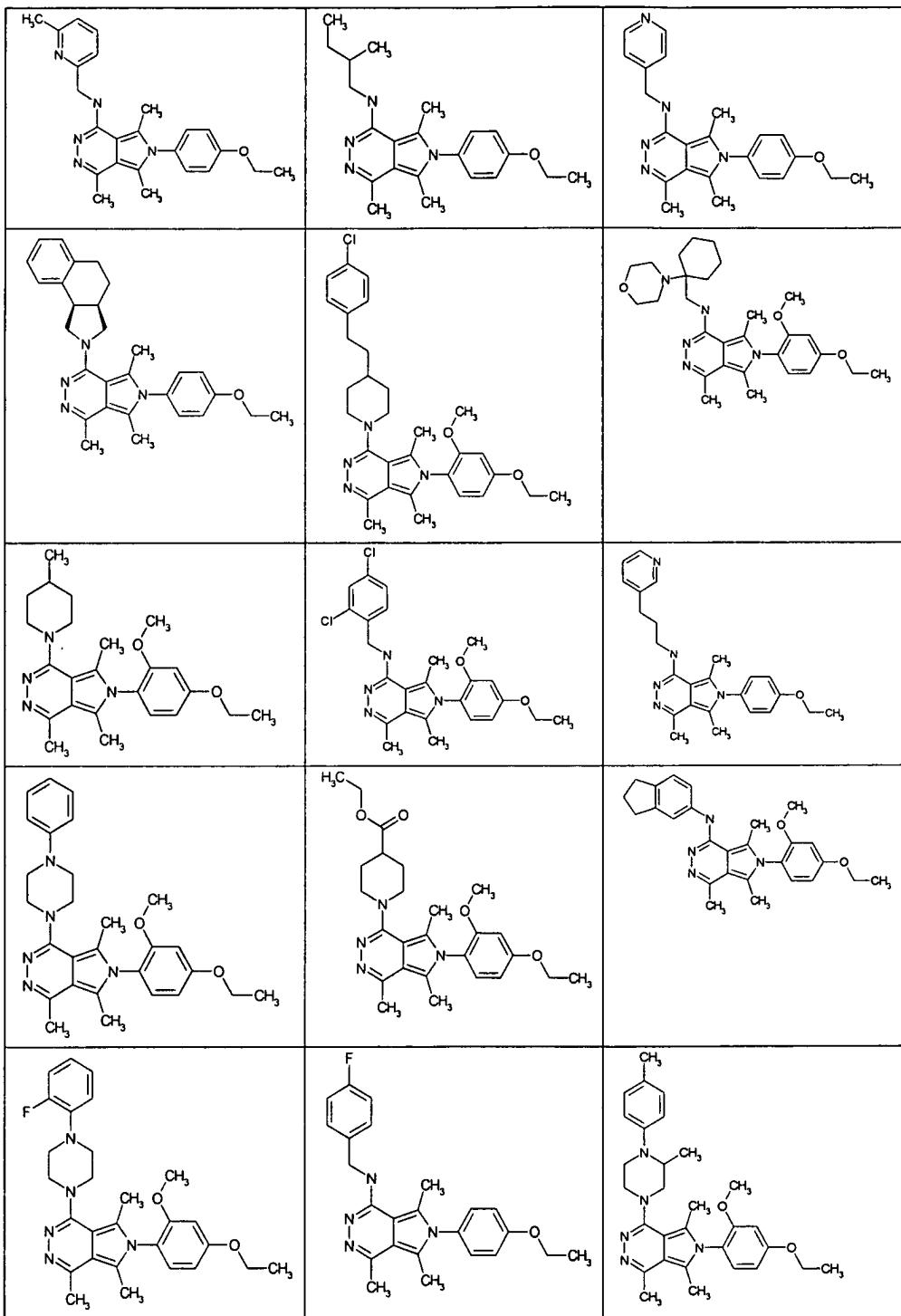


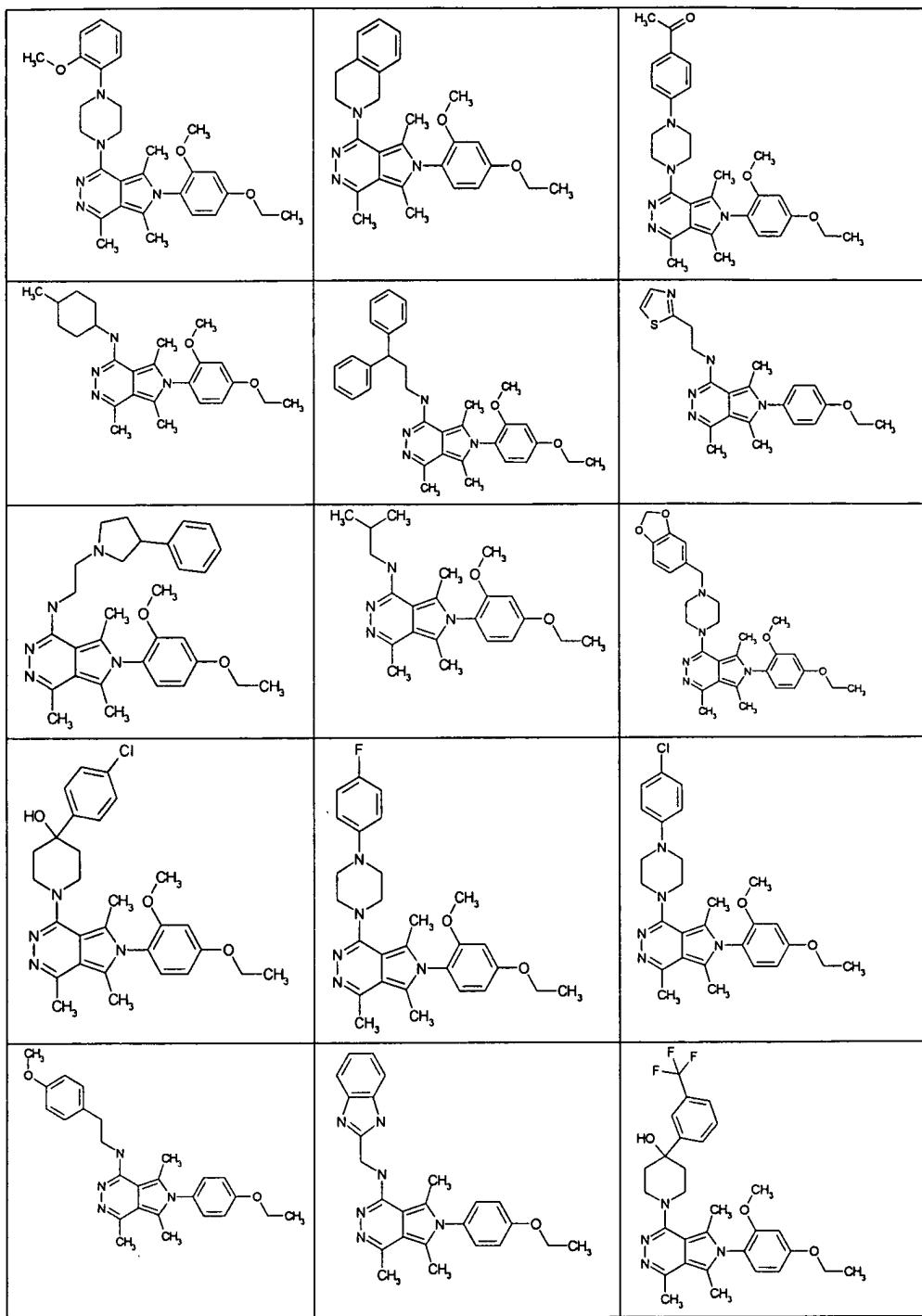


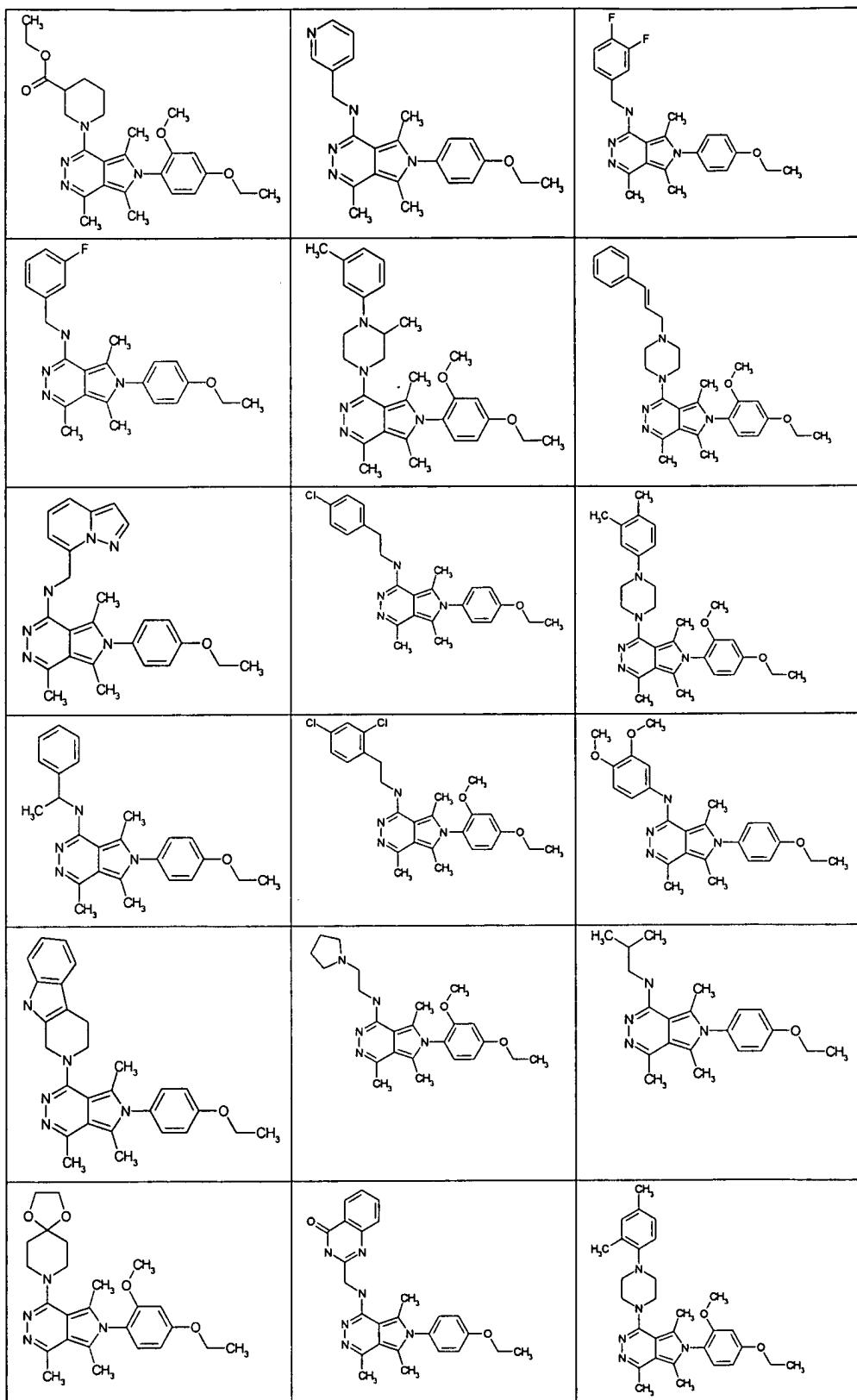


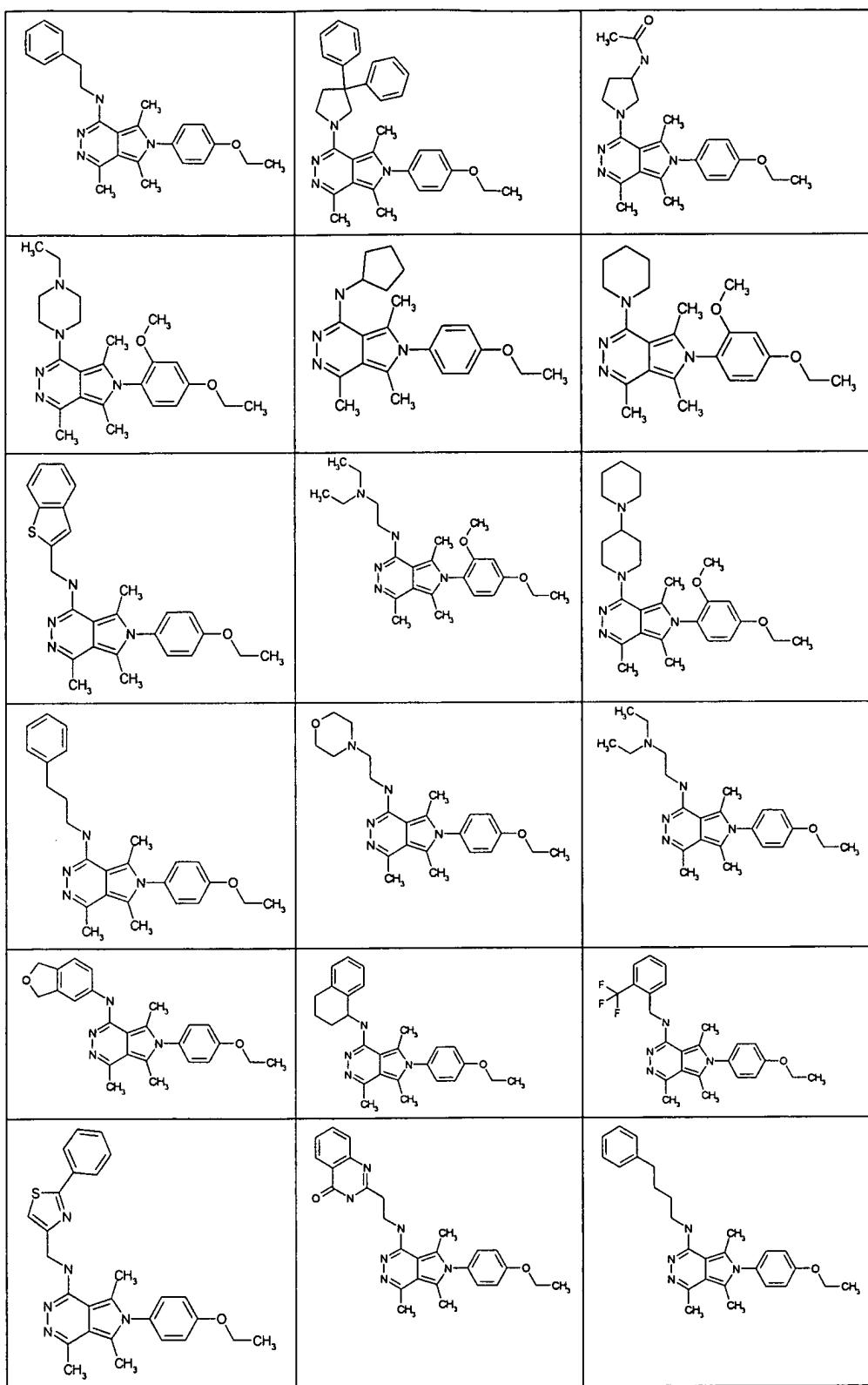


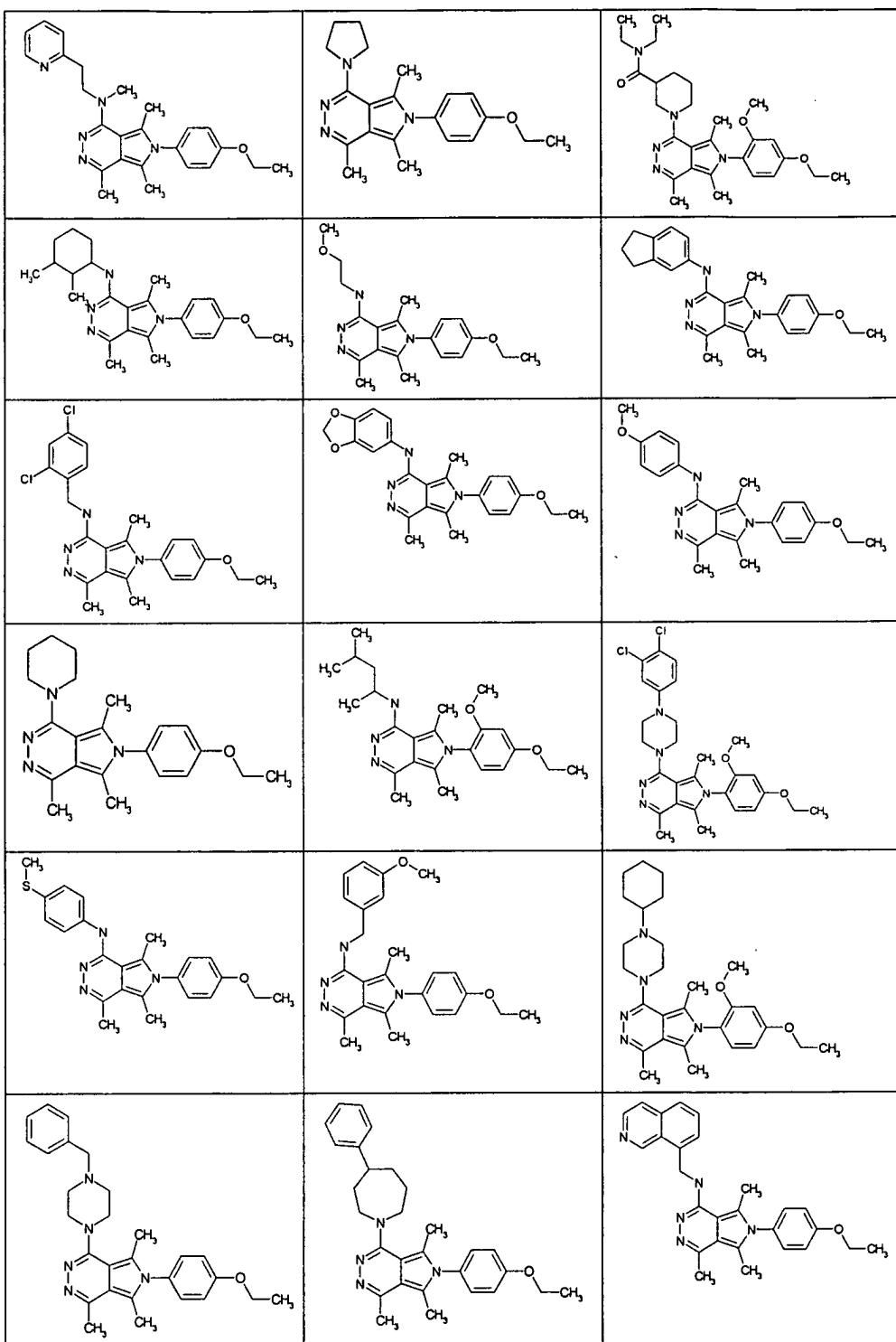


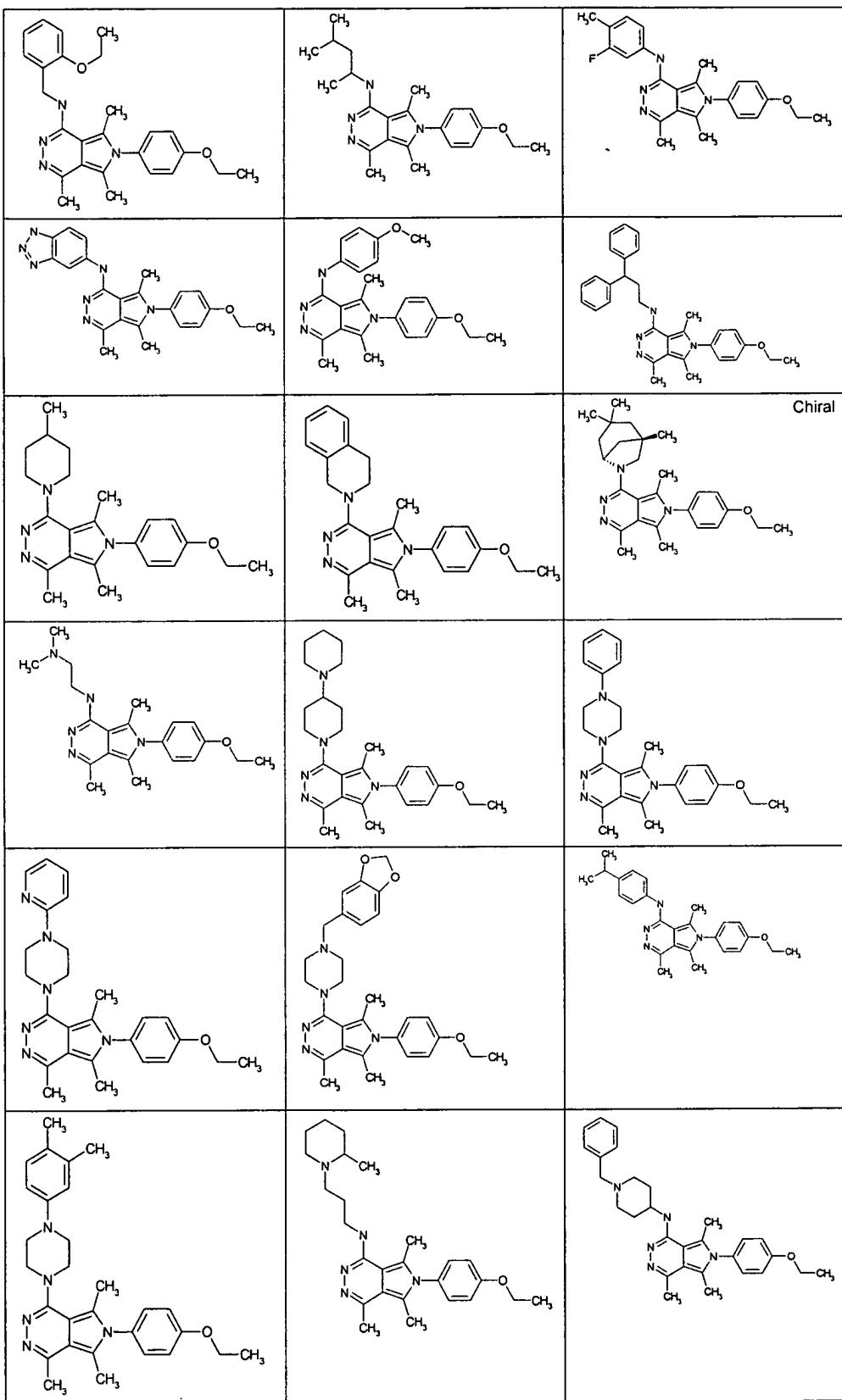


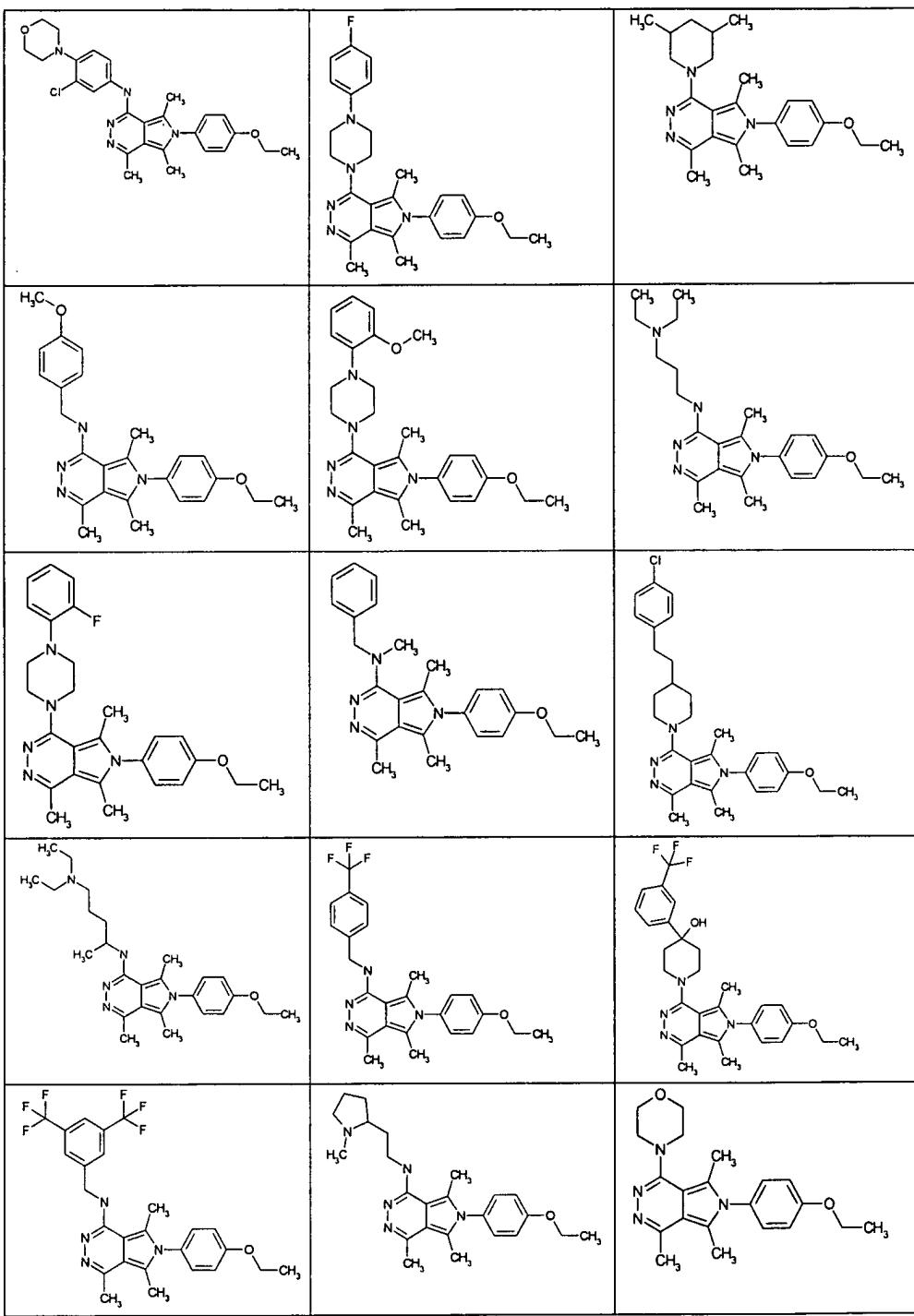


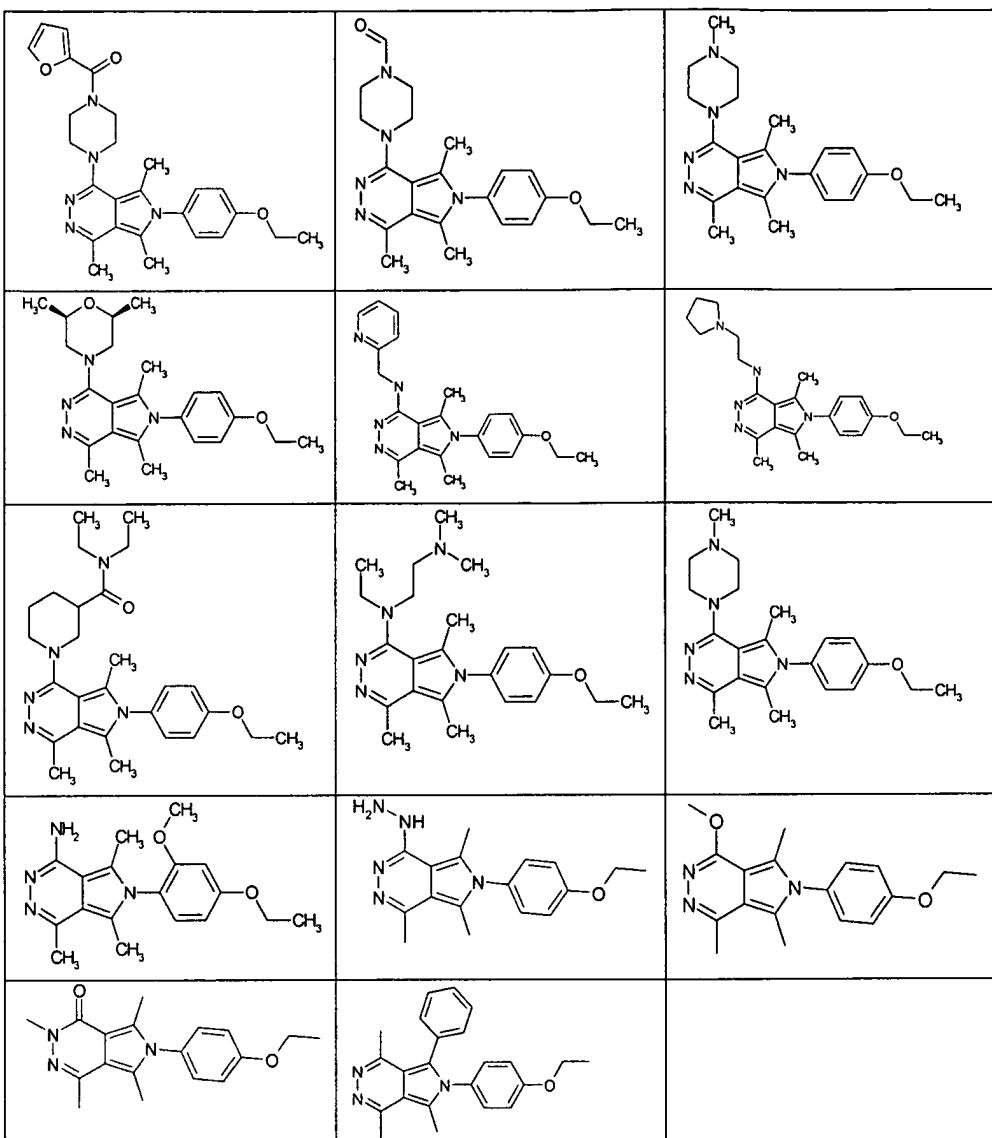








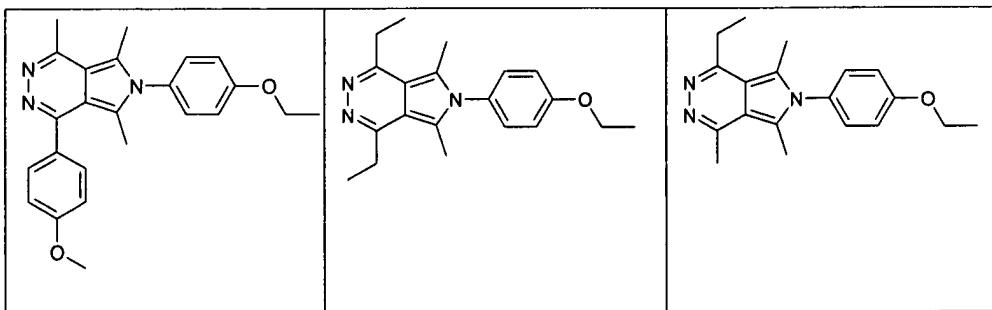


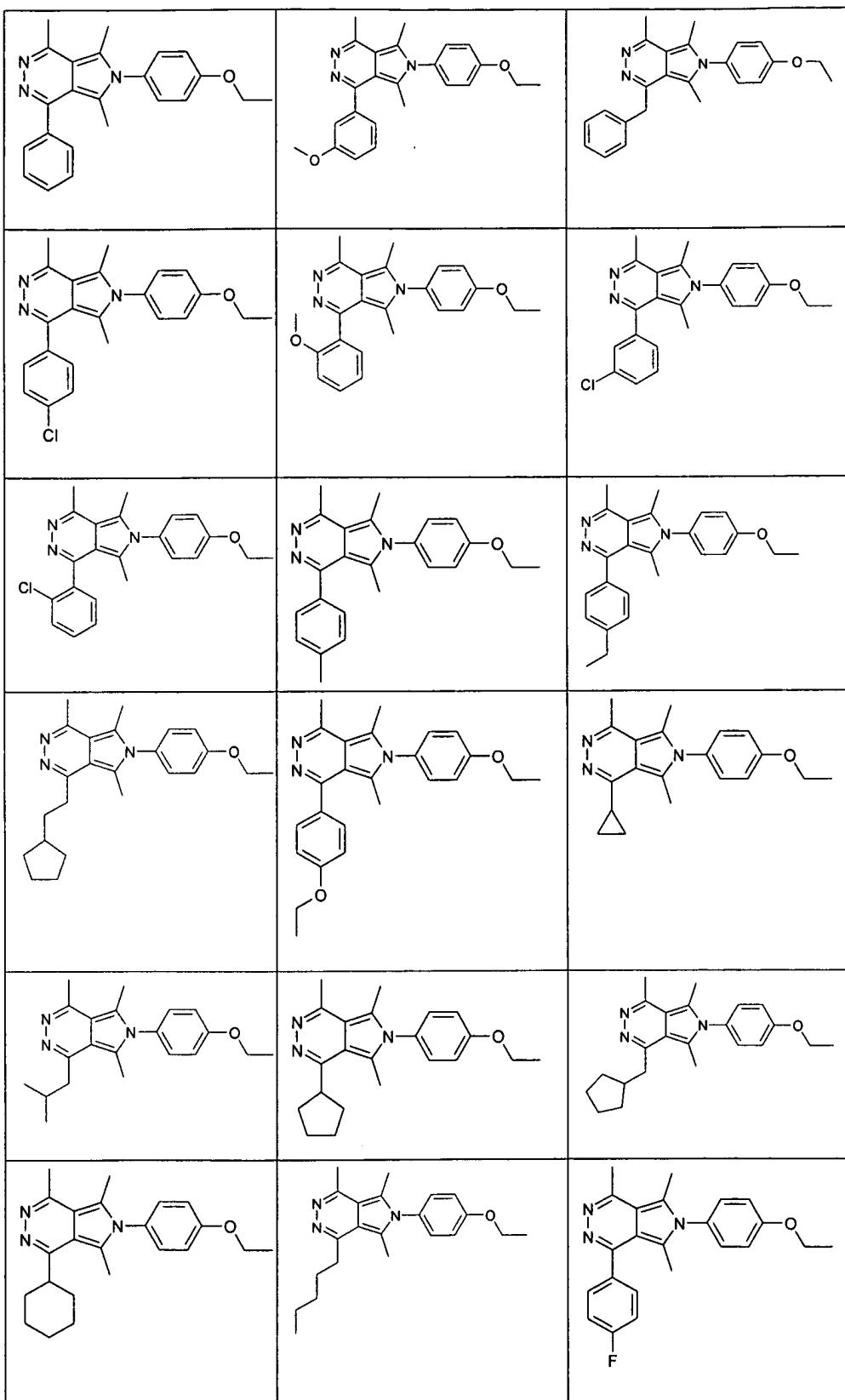


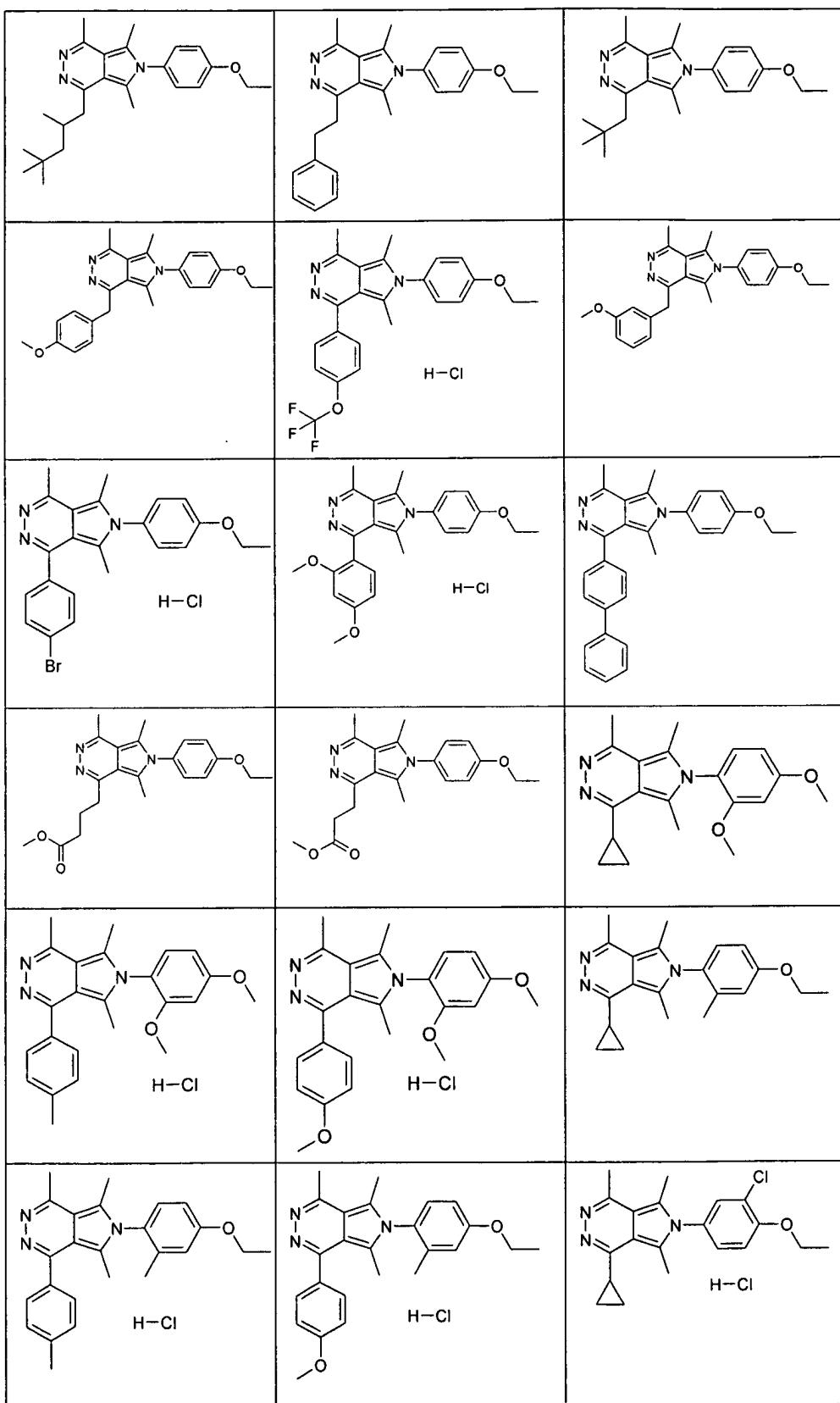
or a pharmaceutically acceptable salt thereof.

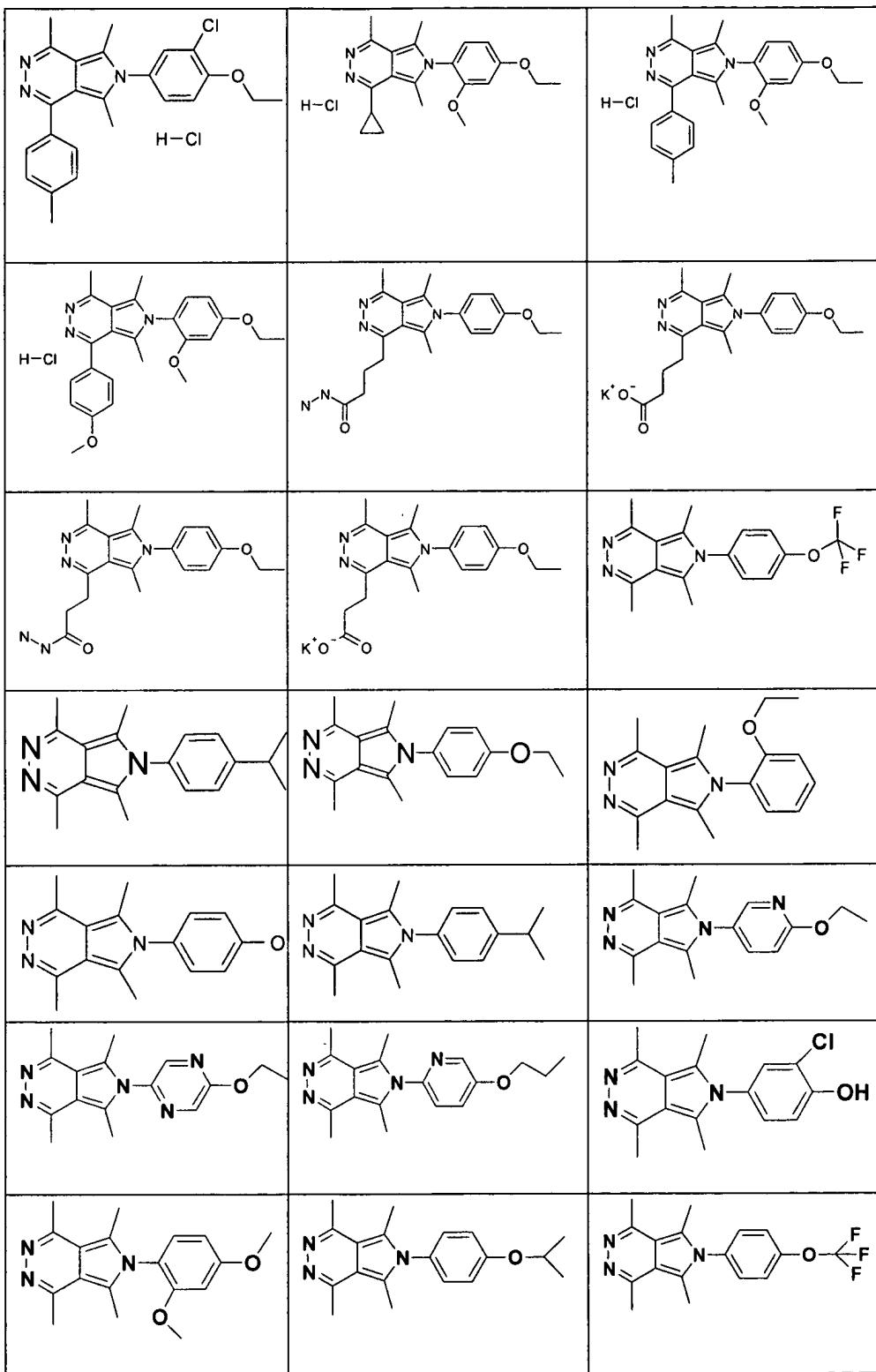
Cancel claims 5 through 24

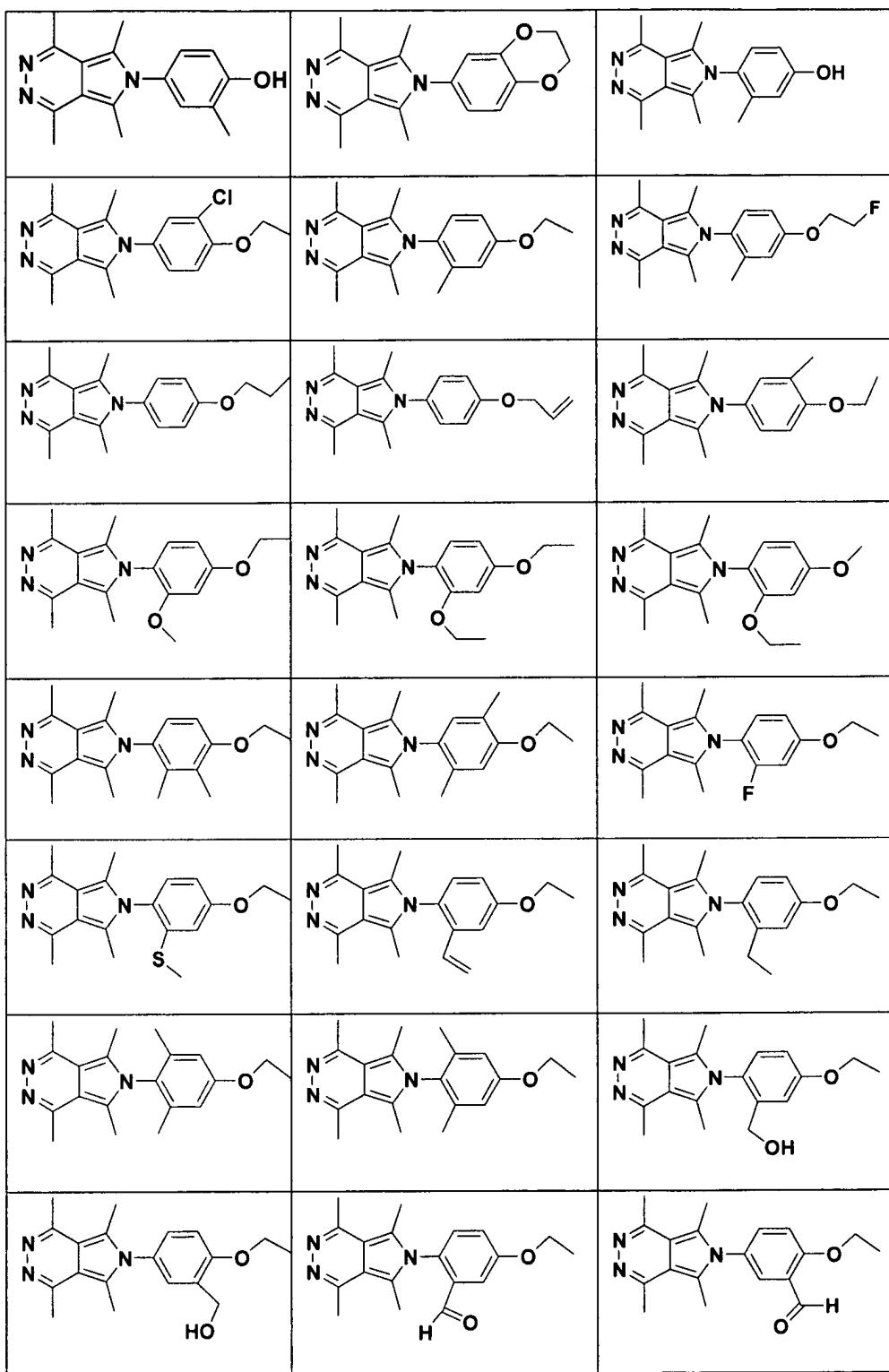
25. A compound selected from:

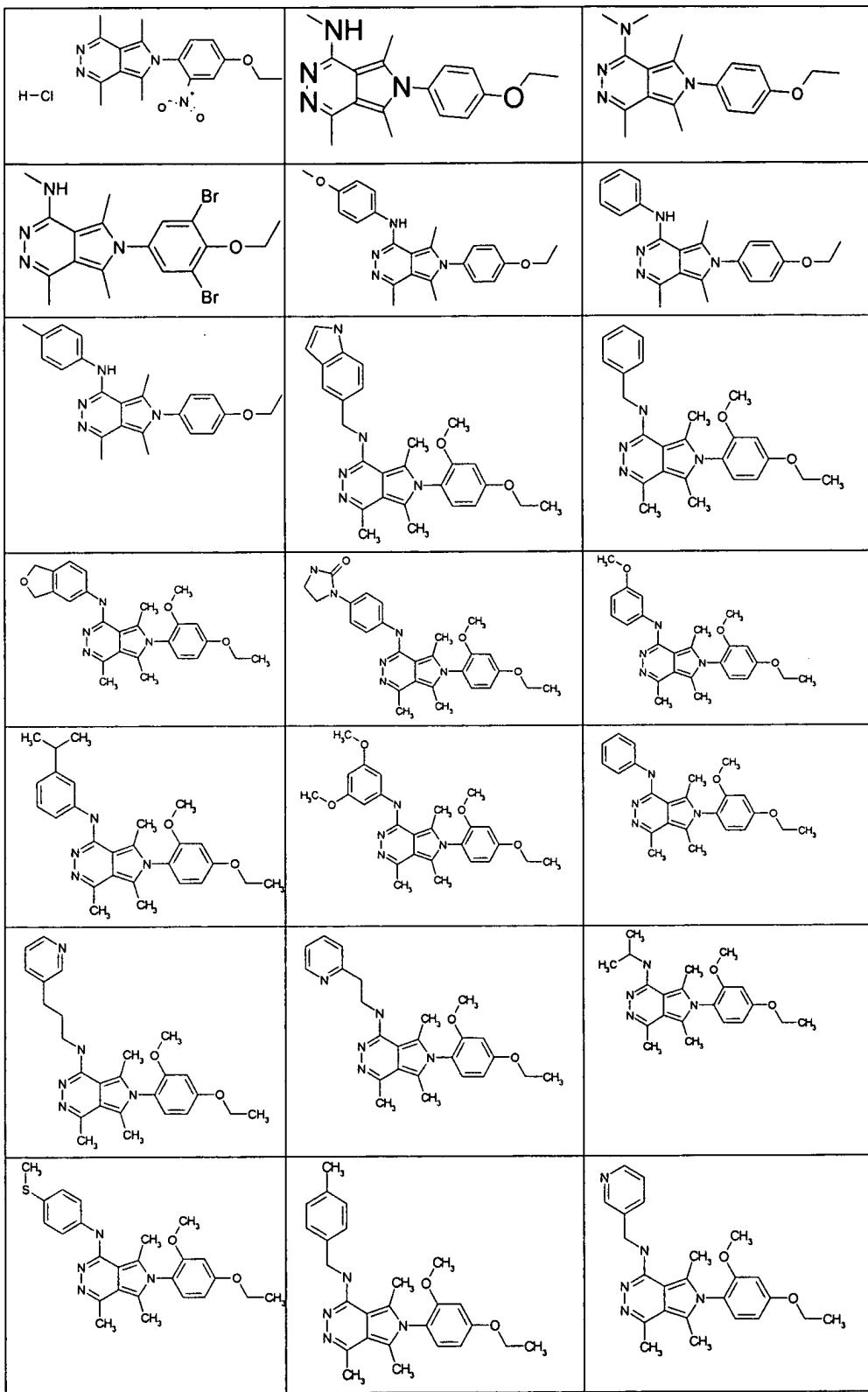


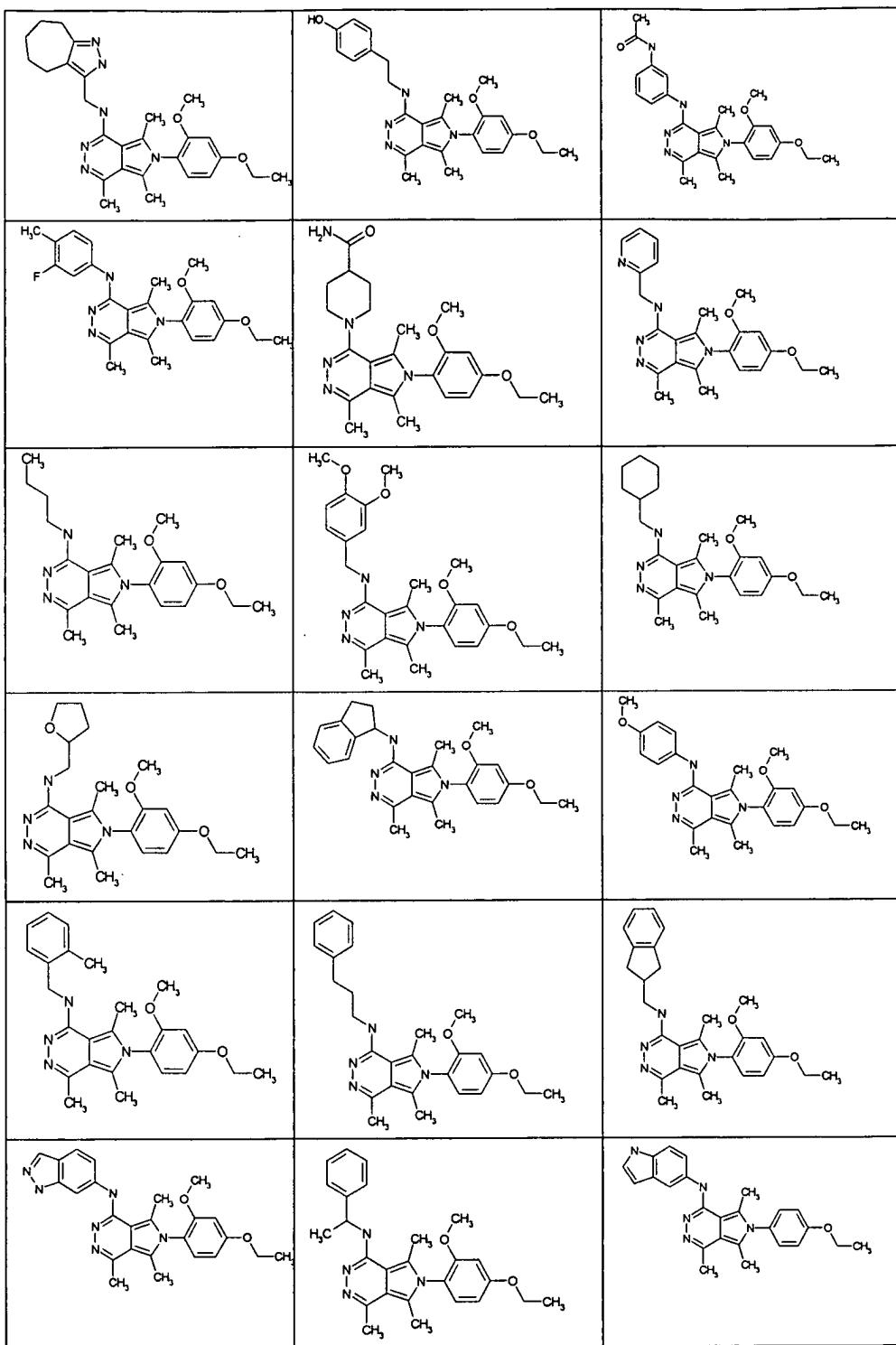


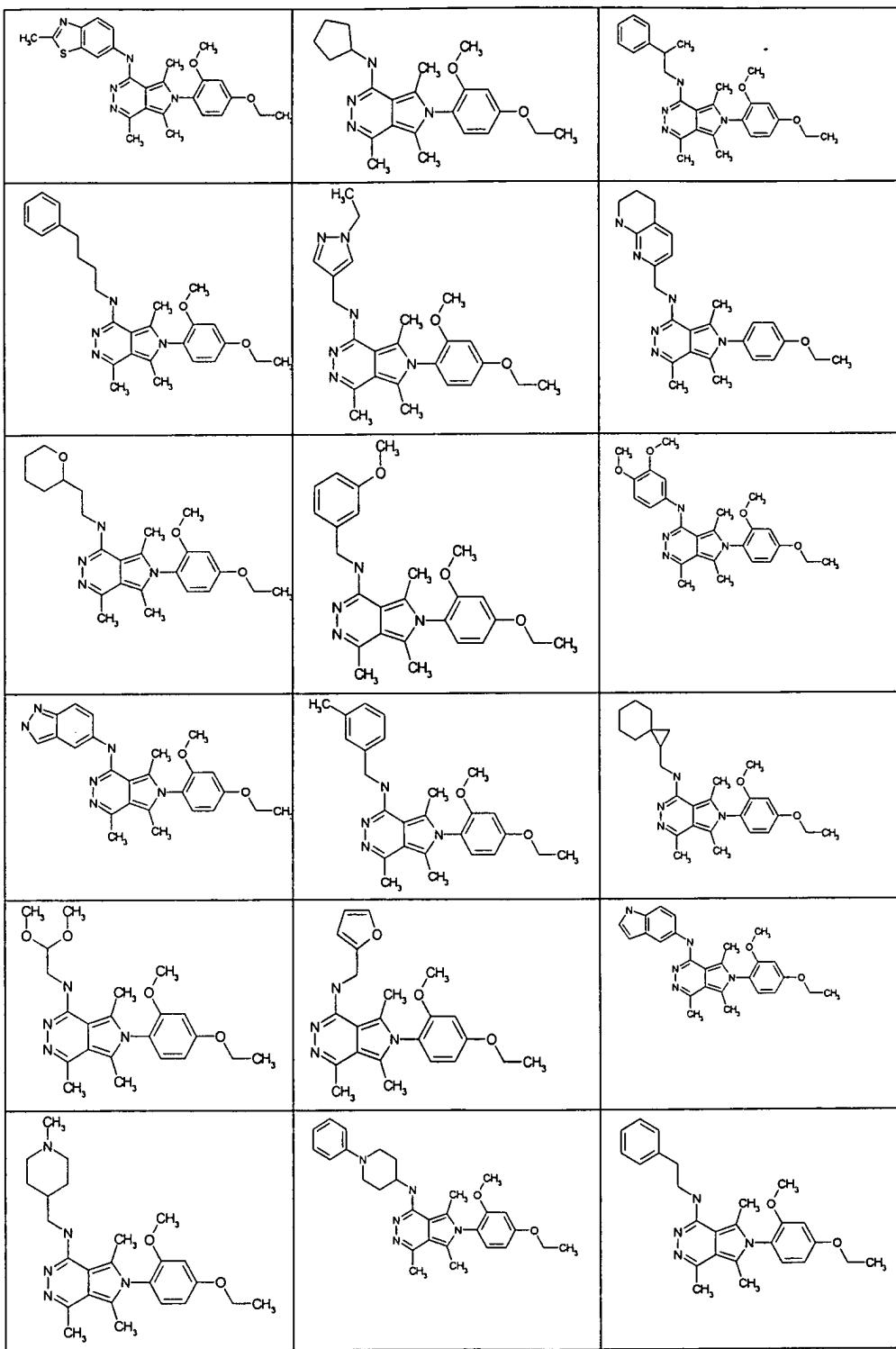


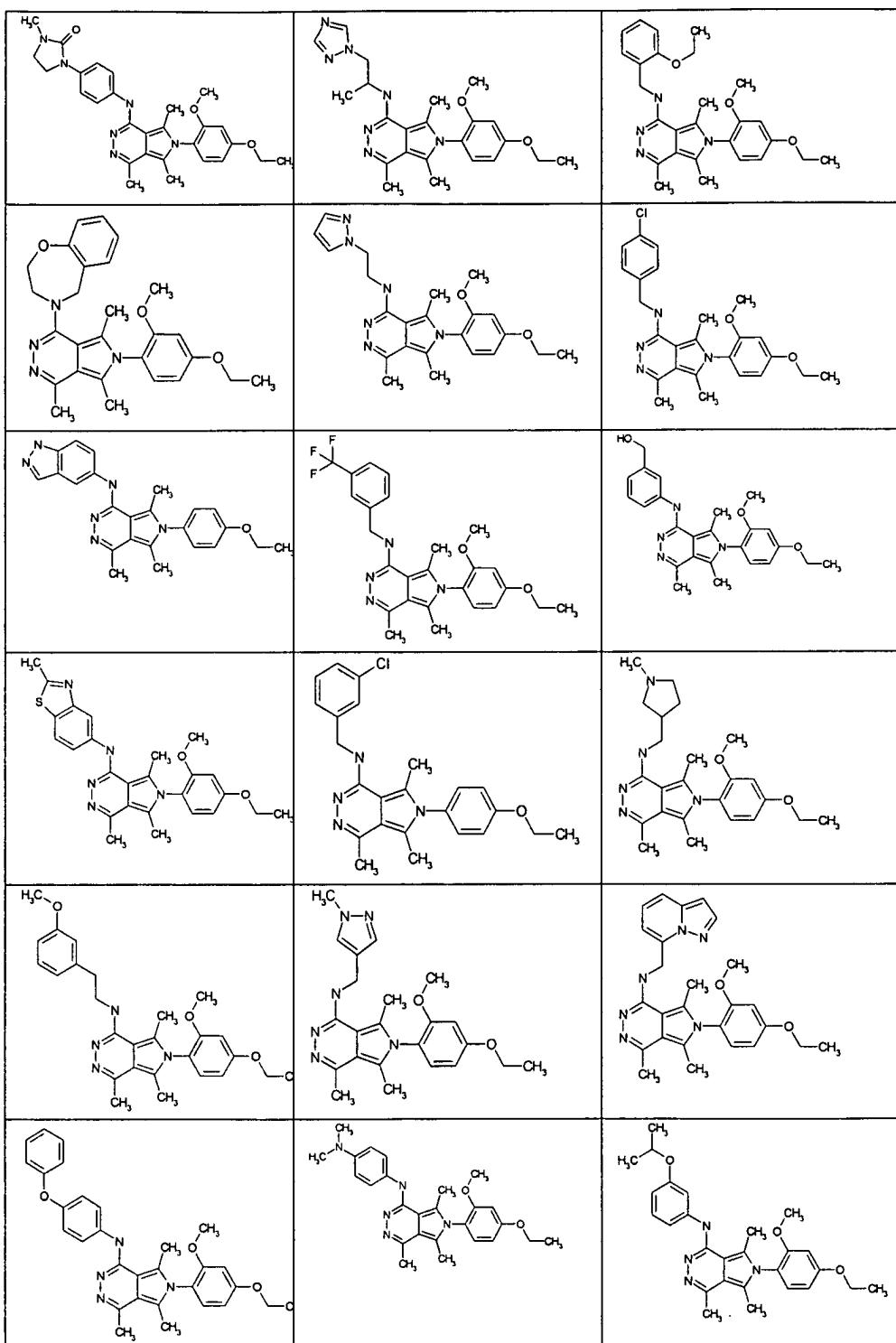


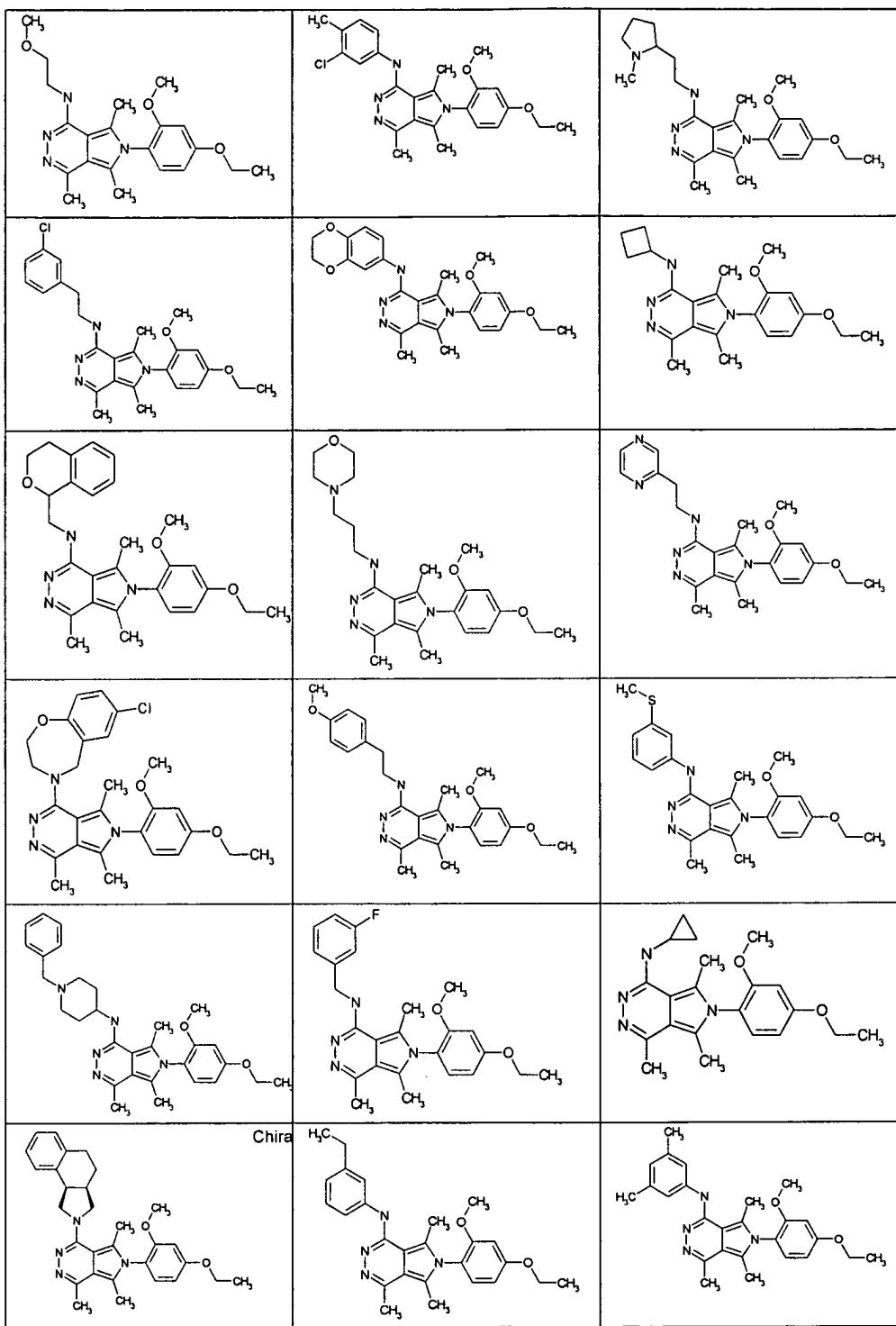


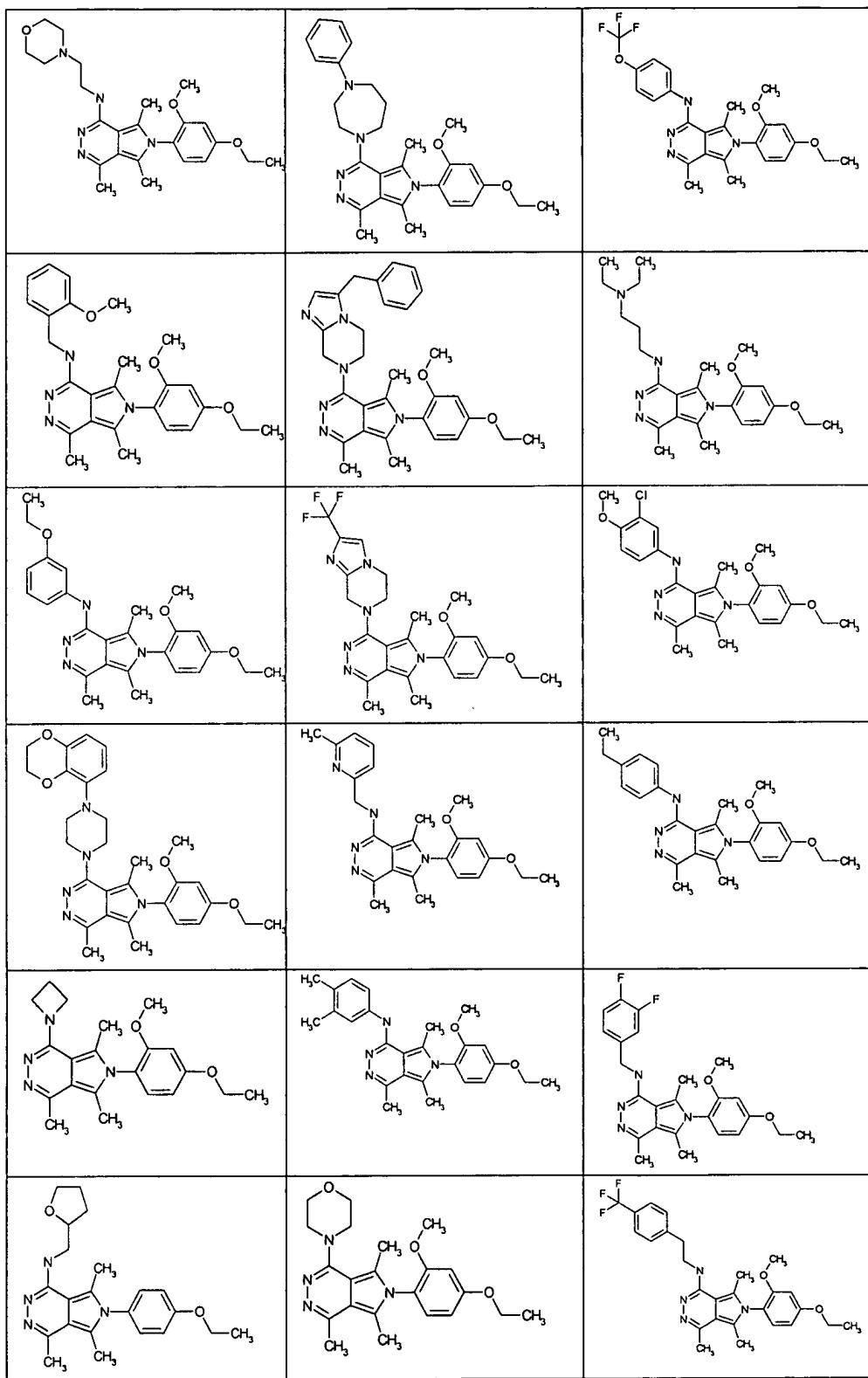


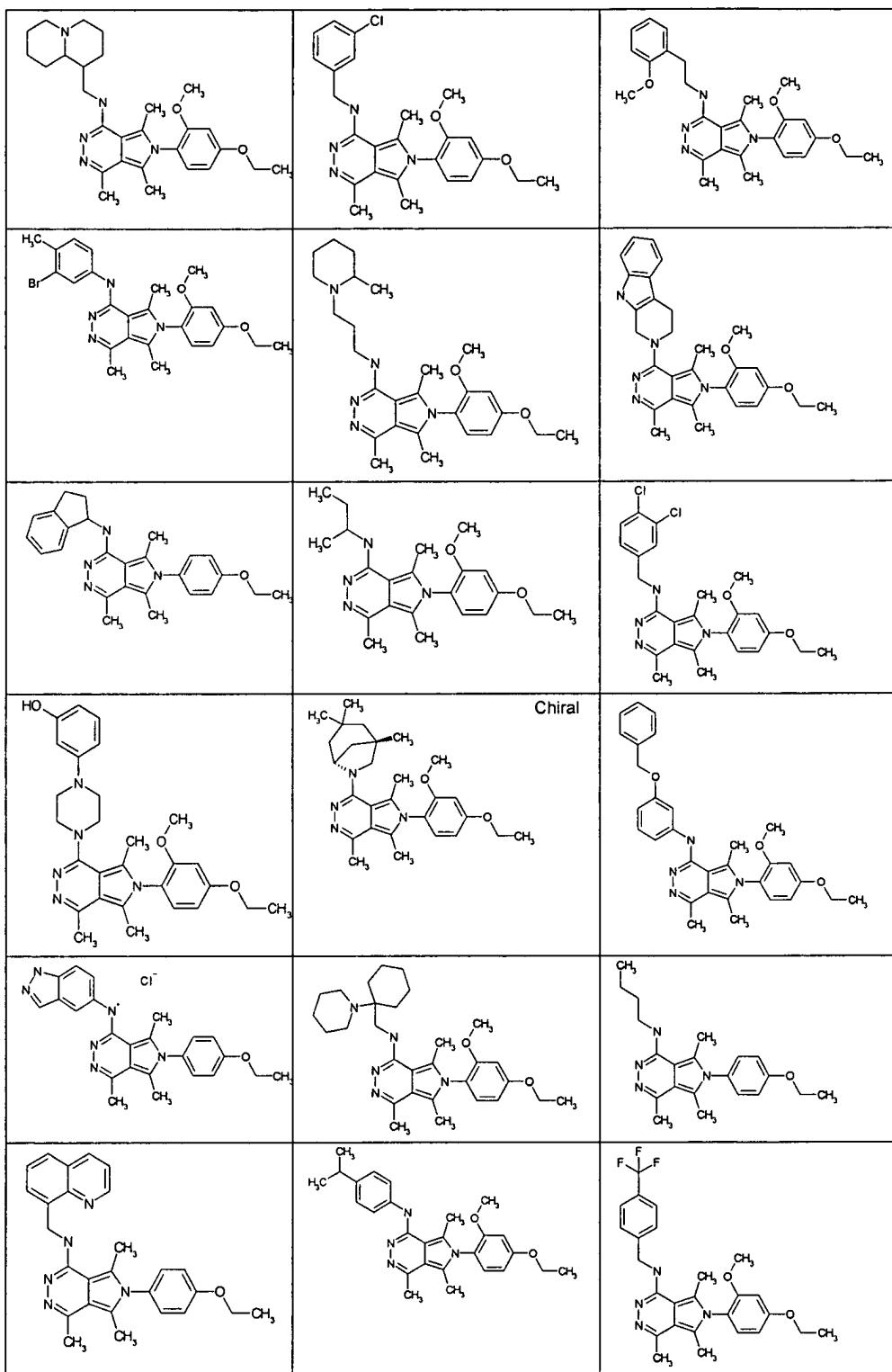


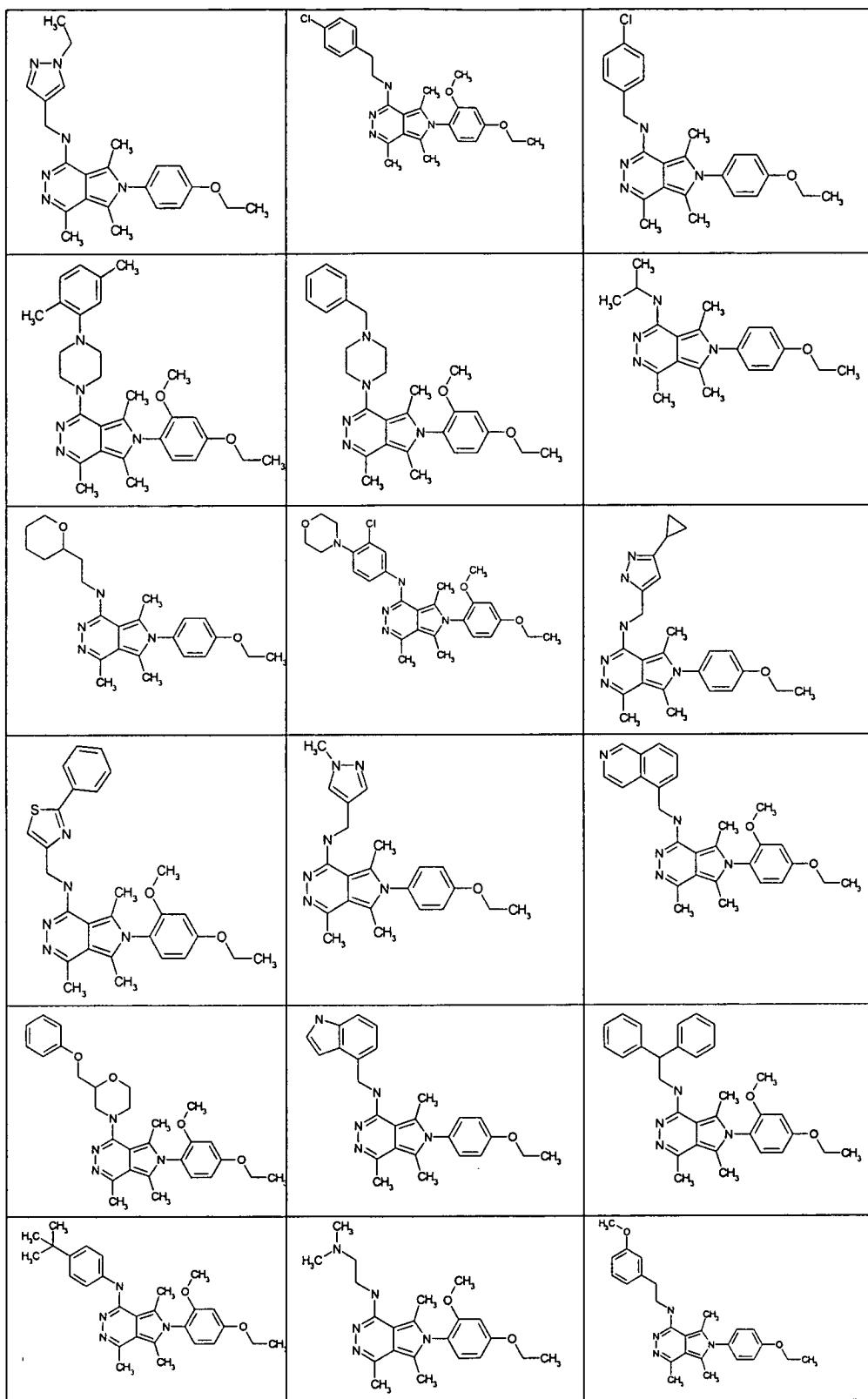


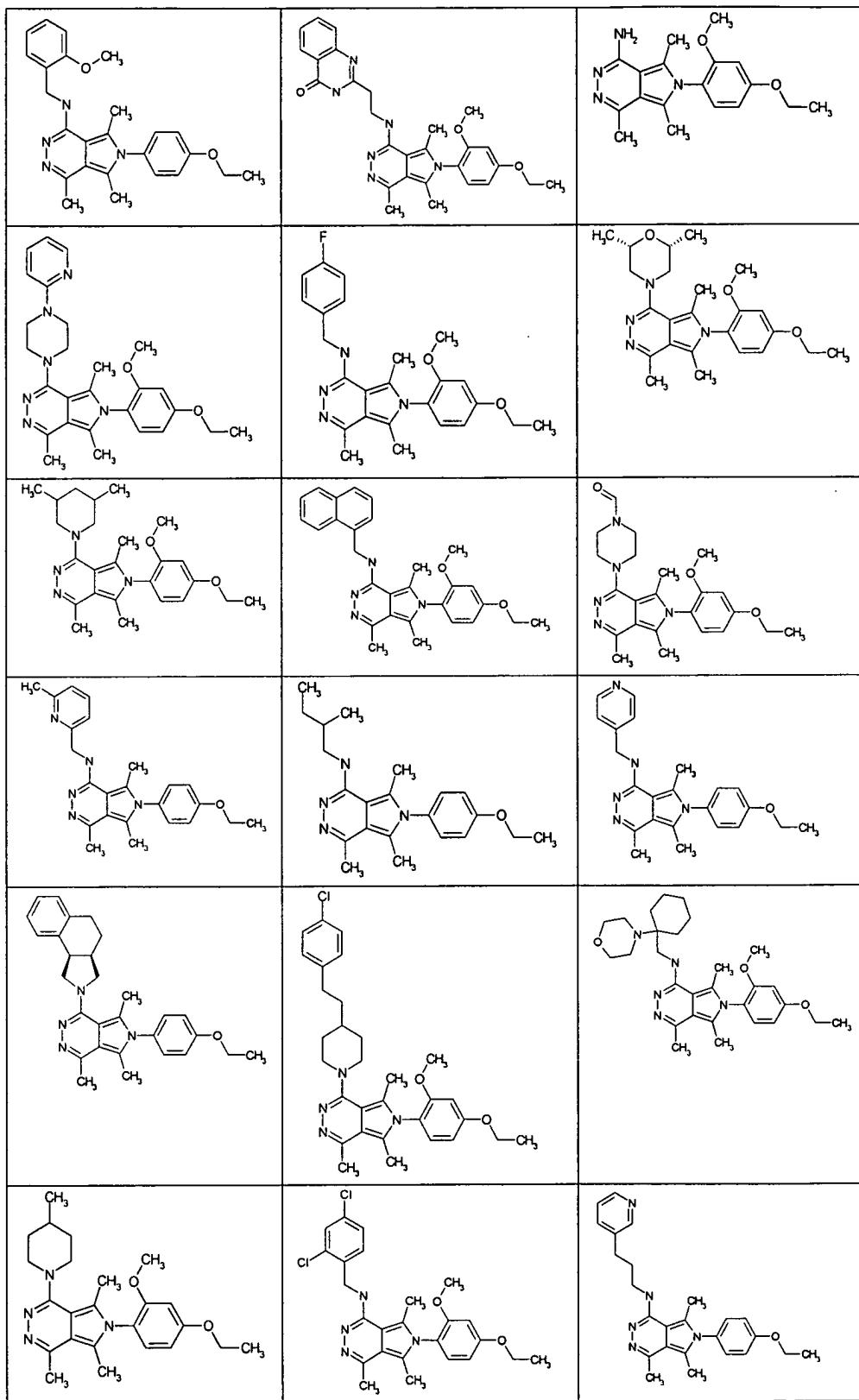


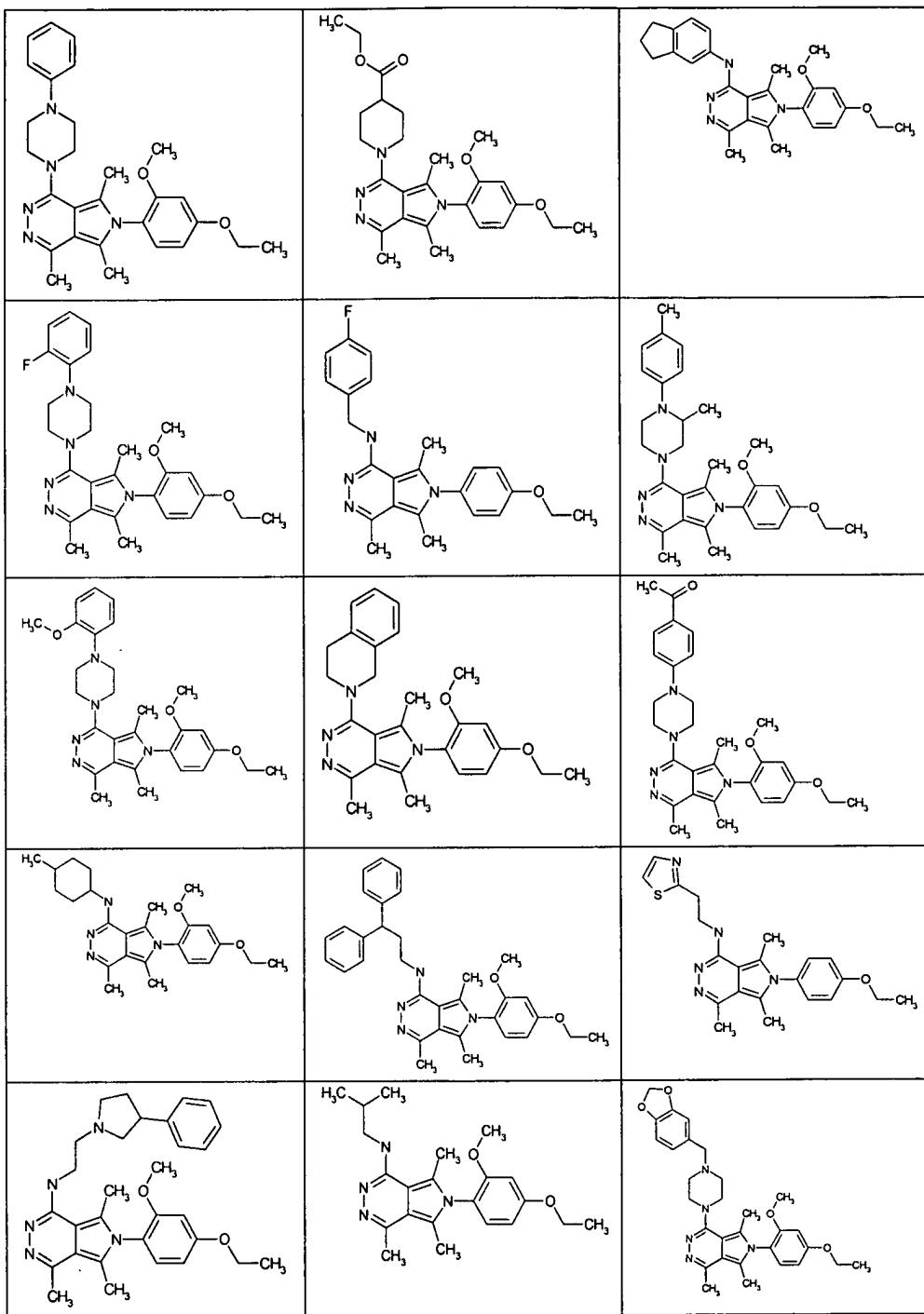


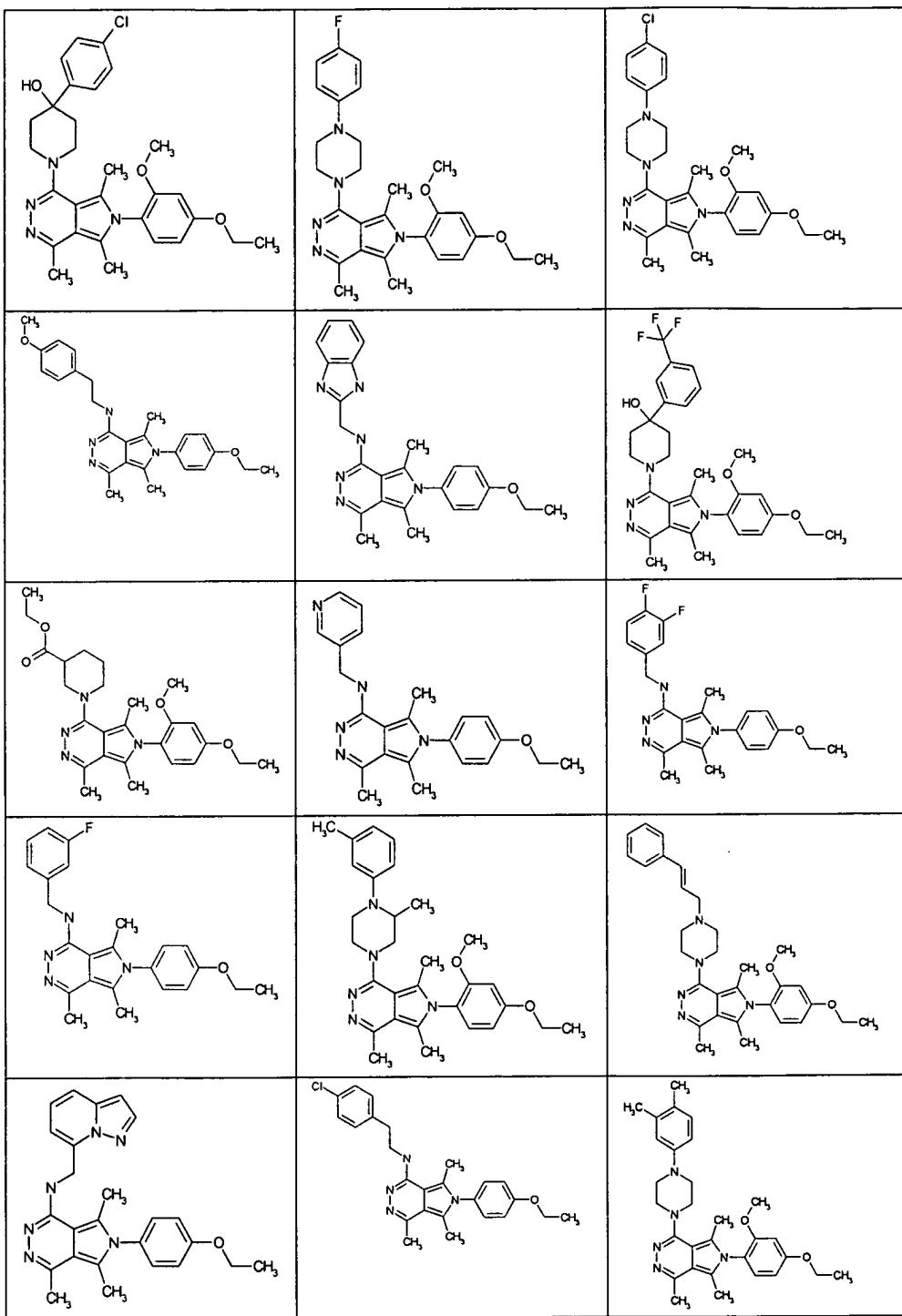


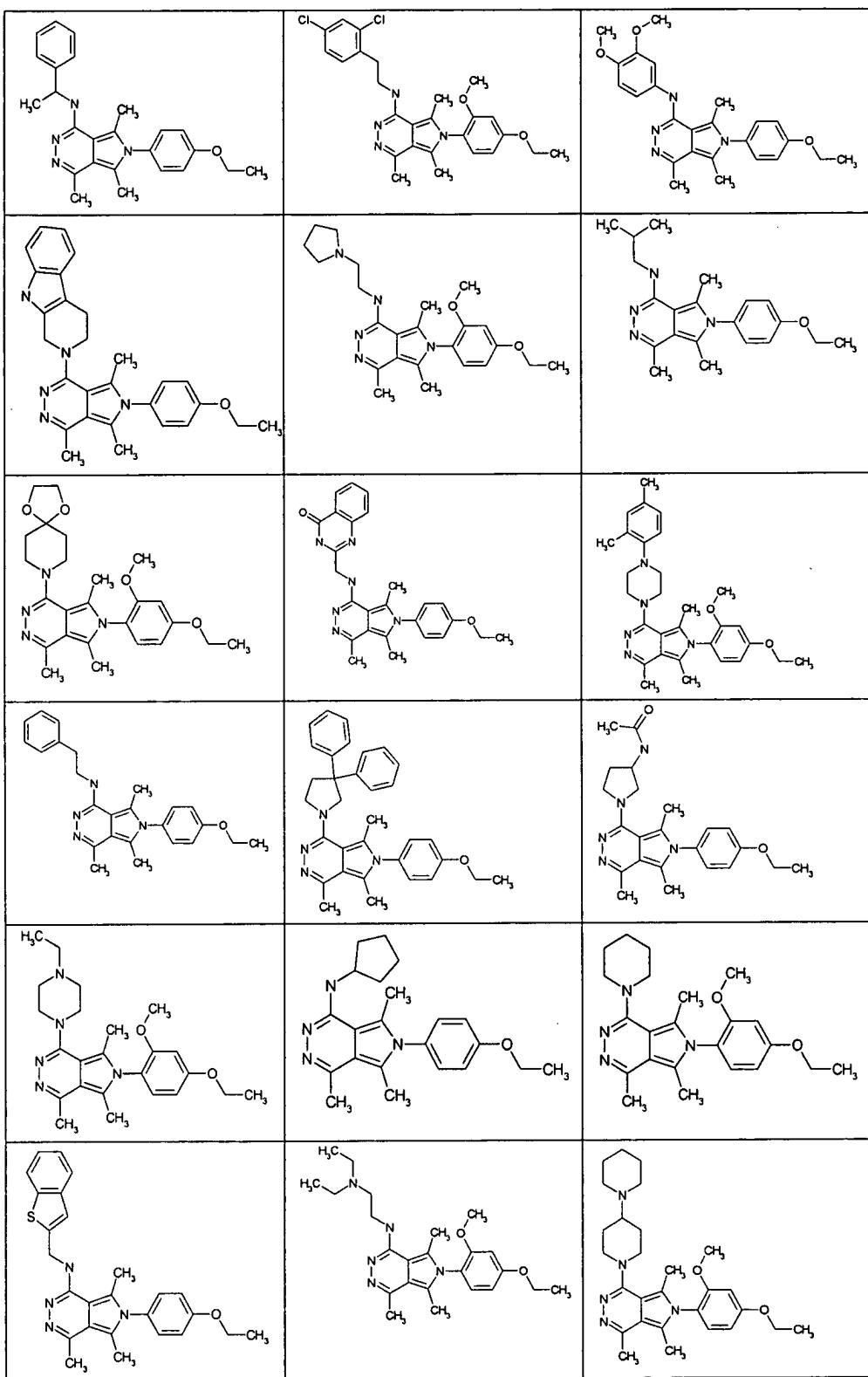


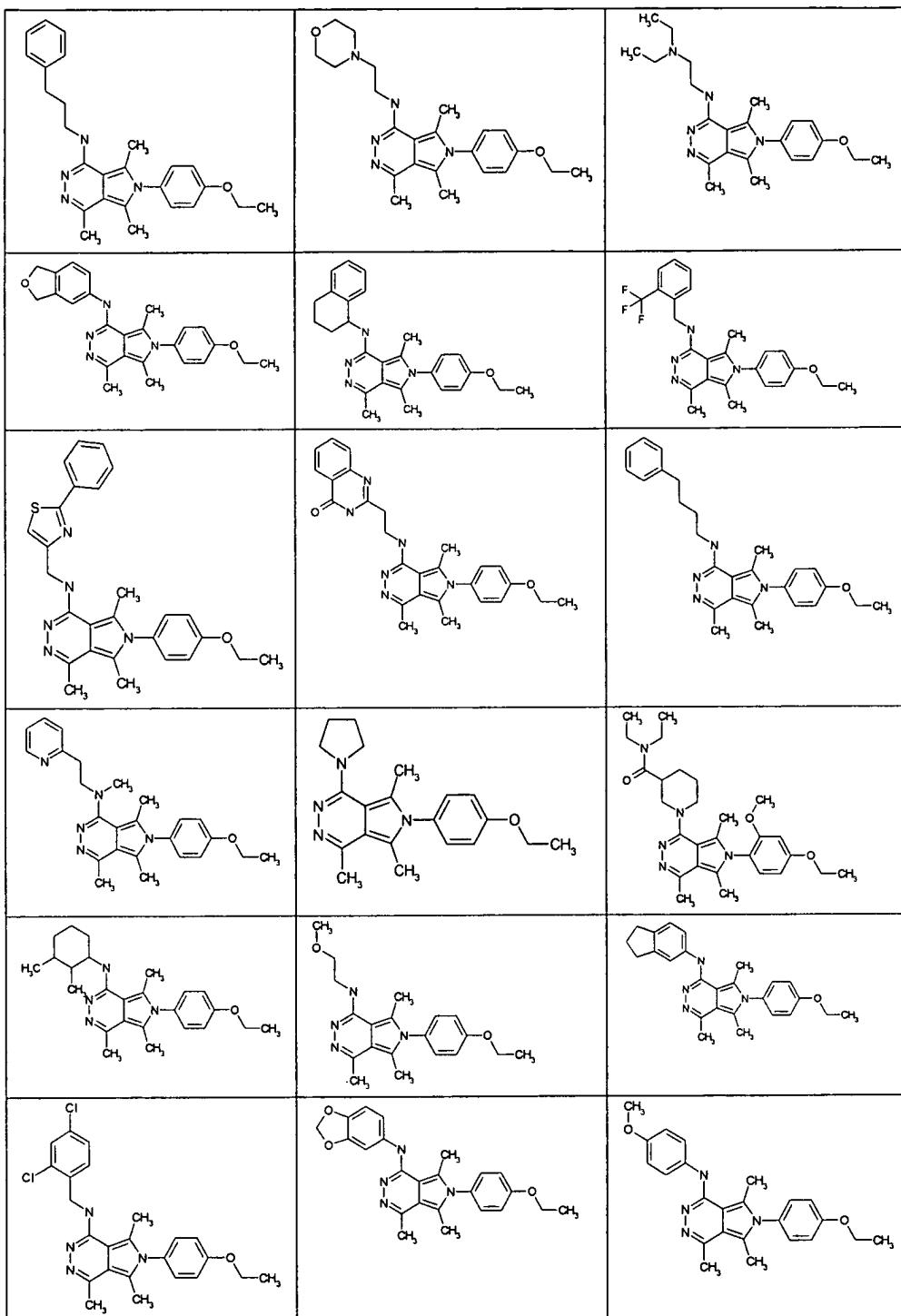


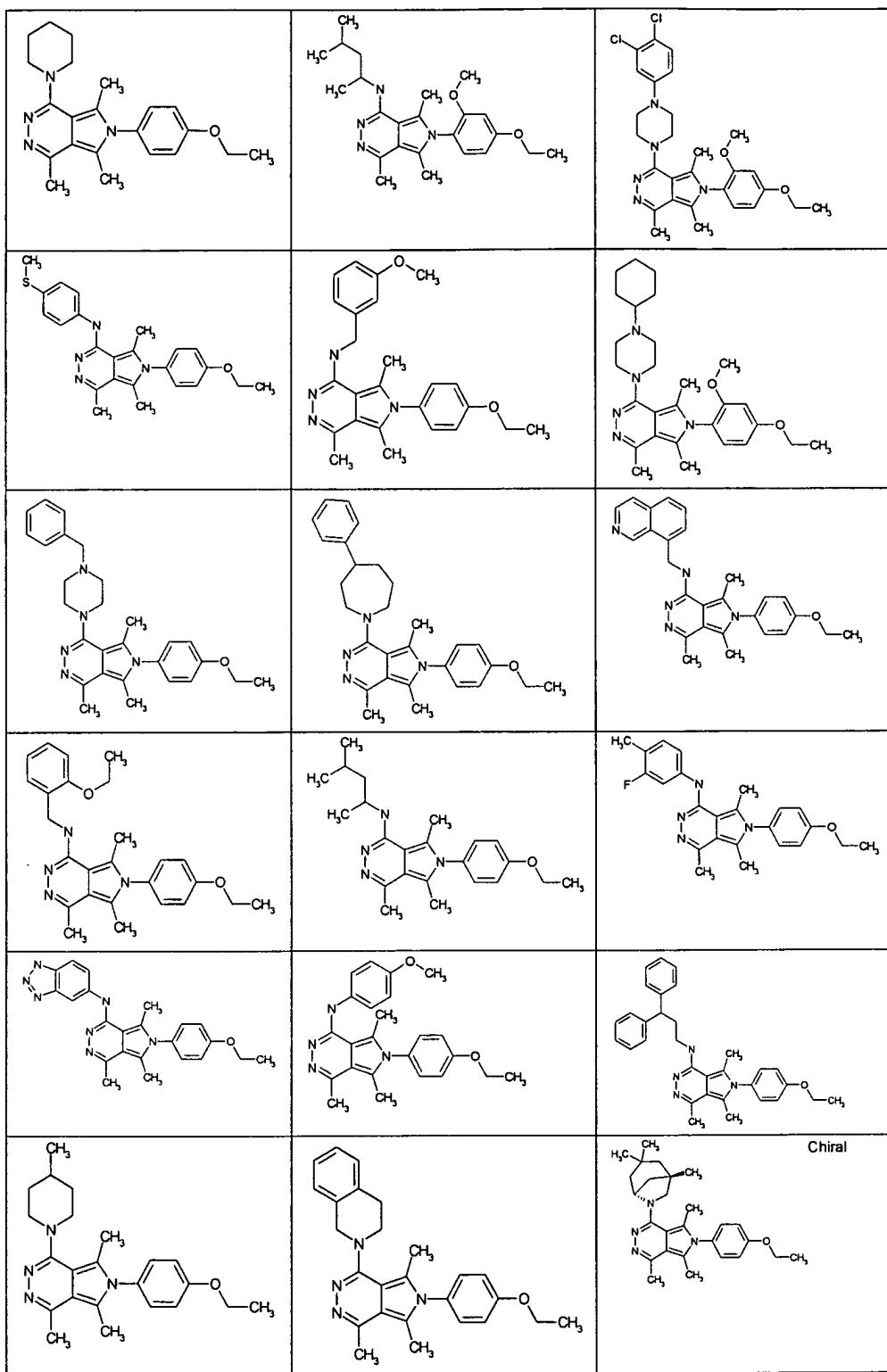


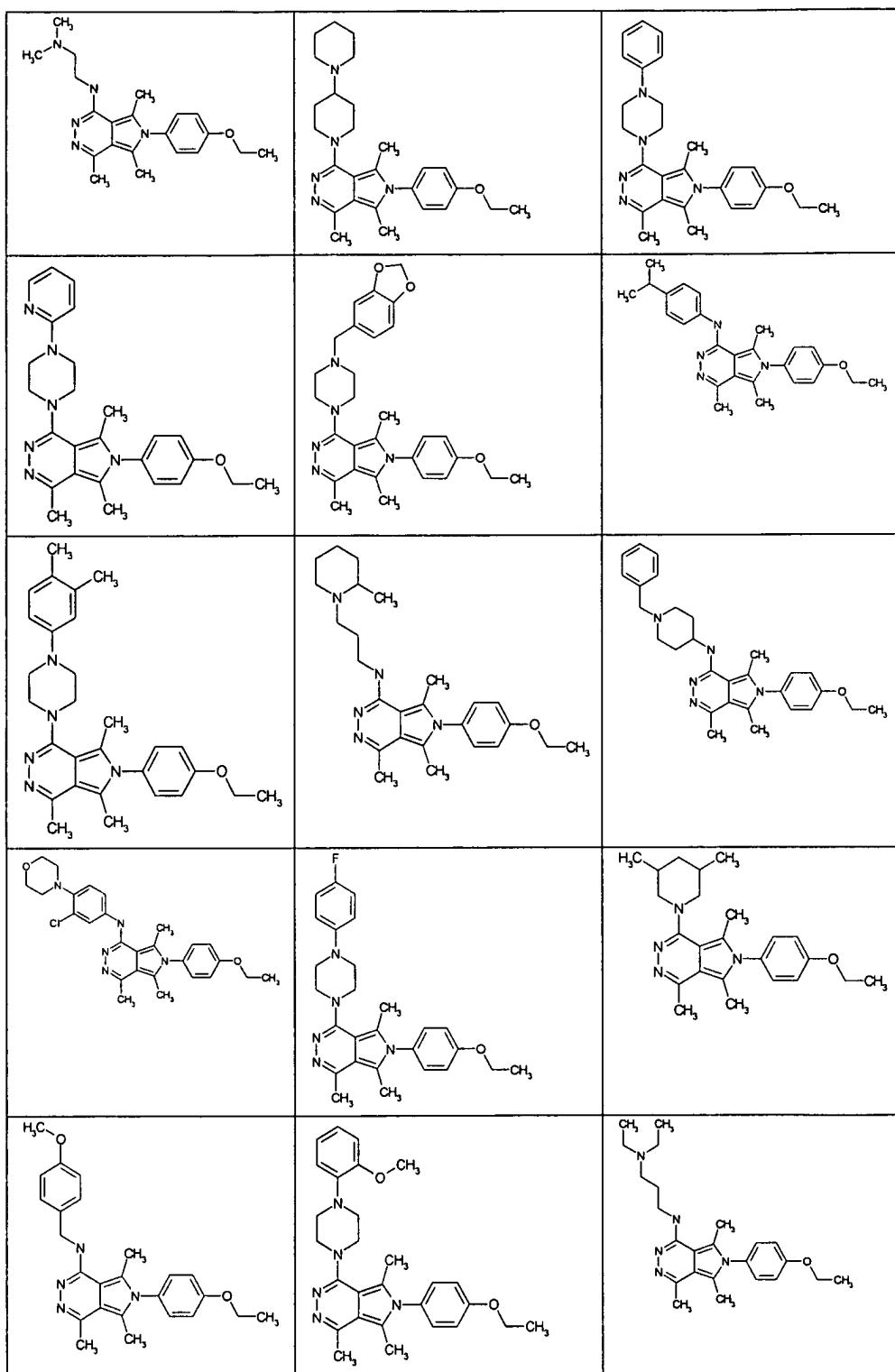


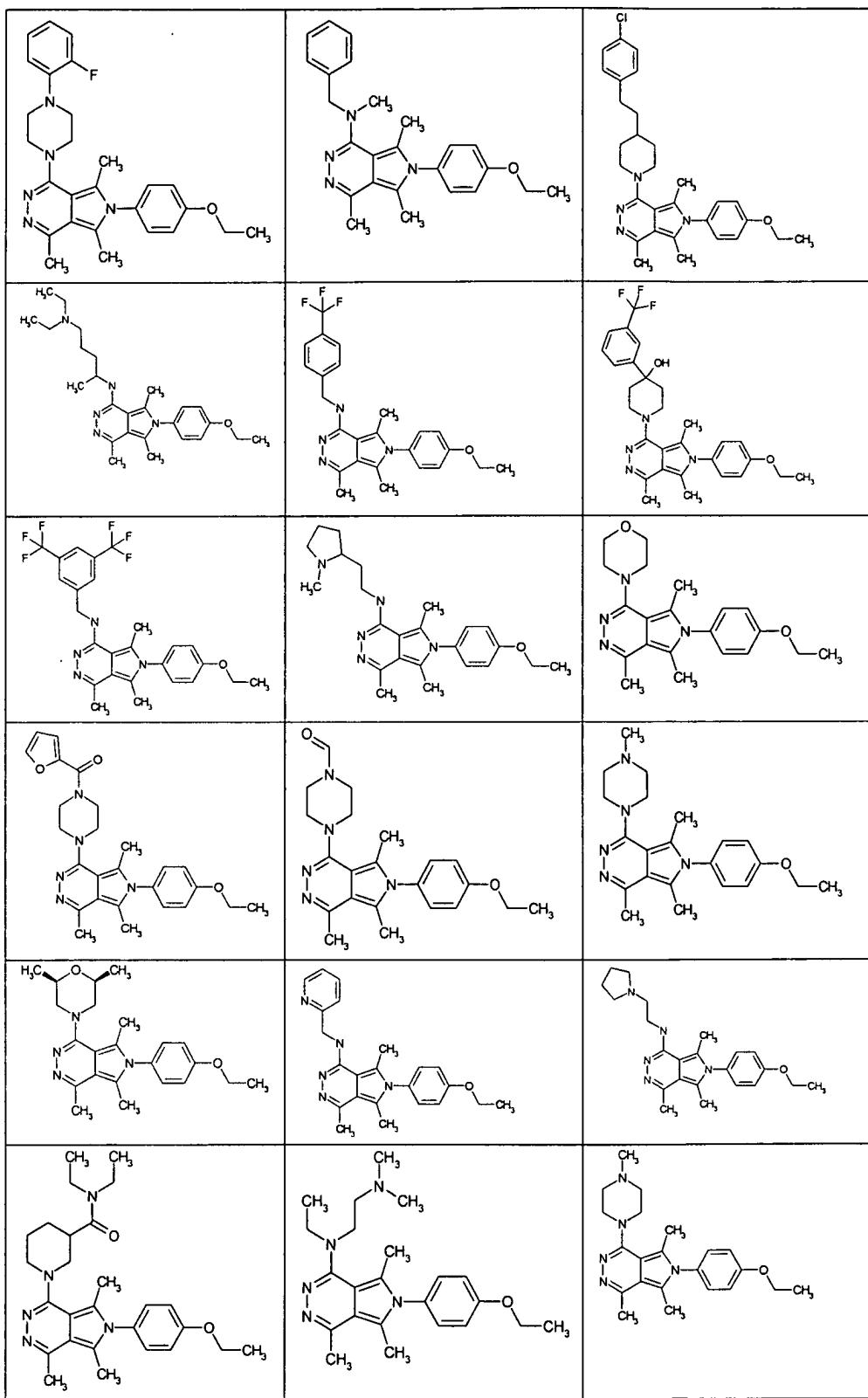


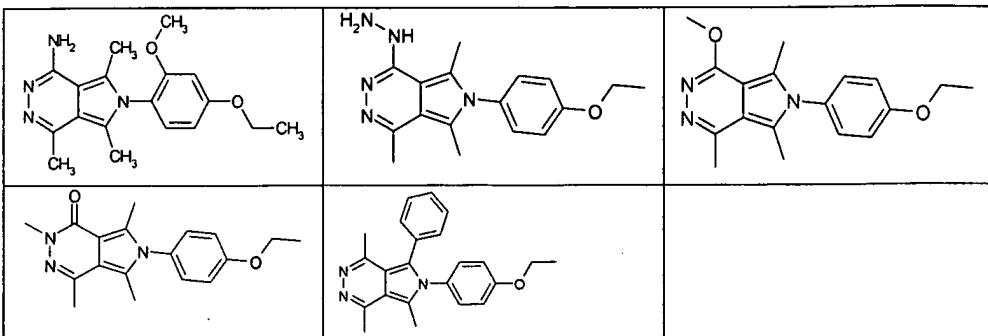






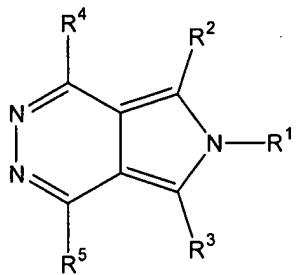






or a pharmaceutically acceptable salt thereof.

26. A compound represented by Formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein

R<sup>1</sup> is -C<sub>0-6</sub>alkyl-aryl, -C<sub>0-6</sub>alkyl-heteroaryl, -C<sub>0-6</sub>alkyl-C<sub>3-6</sub>cycloalkyl, or -C<sub>0-6</sub>alkyl-heteroC<sub>3-7</sub>cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO<sub>2</sub>, -C<sub>1-6</sub>alkyl, -C<sub>0-6</sub>alkyl-C<sub>3-6</sub>cycloalkyl, -C<sub>0-6</sub>alkyl-heteroC<sub>3-7</sub>cycloalkyl, -OR<sup>6</sup>, -NR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -N(-NR<sup>88</sup>R<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -NR<sup>6</sup>COR<sup>7</sup>, -NR<sup>6</sup>CO<sub>2</sub>R<sup>7</sup>, -NR<sup>6</sup>SO<sub>2</sub>R<sup>88</sup>, -NR<sup>6</sup>CONR<sup>7</sup>R<sup>8</sup>, -SR<sup>88</sup>, -SOR<sup>88</sup>, -SO<sub>2</sub>R<sup>88</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, -COR<sup>6</sup>, -CO<sub>2</sub>R<sup>6</sup>, -CONR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)R<sup>7</sup>, or -C(=NOR<sup>6</sup>)R<sup>7</sup> substituents;

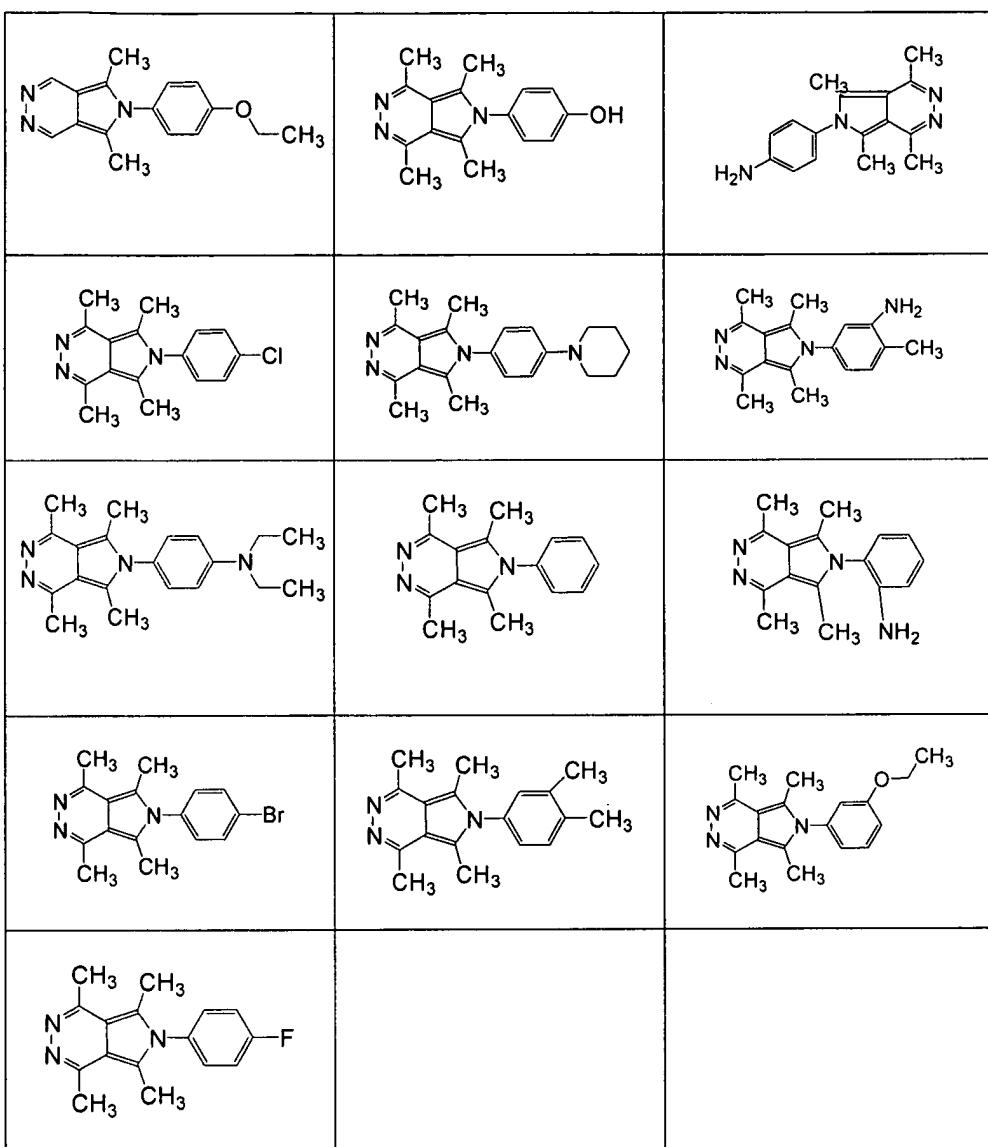
R<sup>2</sup>, R<sup>4</sup>, R<sup>3</sup>, and R<sup>5</sup> each independently is -C<sub>0-6</sub>alkyl, -C<sub>0-6</sub>alkyl-aryl, -C<sub>0-6</sub>alkyl-heteroaryl, -C<sub>0-6</sub>alkyl-C<sub>3-6</sub>cycloalkyl, or -C<sub>0-6</sub>alkyl-heteroC<sub>3-7</sub>cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO<sub>2</sub>, -C<sub>1-6</sub>alkyl, -OR<sup>6</sup>, -NR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -N(-NR<sup>88</sup>R<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -NR<sup>6</sup>COR<sup>7</sup>, -NR<sup>6</sup>CO<sub>2</sub>R<sup>7</sup>, -NR<sup>6</sup>SO<sub>2</sub>R<sup>88</sup>, -NR<sup>6</sup>CONR<sup>7</sup>R<sup>8</sup>, -SR<sup>88</sup>, -SOR<sup>88</sup>, -SO<sub>2</sub>R<sup>88</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, -COR<sup>6</sup>, -CO<sub>2</sub>R<sup>6</sup>, -CONR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)R<sup>7</sup>, or -C(=NOR<sup>6</sup>)R<sup>7</sup> substituents; and

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>88</sup> each independently is -C<sub>0-6</sub>alkyl, -C<sub>3-7</sub>cycloalkyl, heteroaryl, or aryl; optionally substituted with 1-5 independent halogen, -CN, -C<sub>1-6</sub>alkyl, -

O(C<sub>0</sub>-6alkyl), -O(C<sub>3</sub>-7cycloalkyl), -O(aryl), -N(C<sub>0</sub>-6alkyl)(C<sub>0</sub>-6alkyl), -N(C<sub>0</sub>-6alkyl)(C<sub>3</sub>-7cycloalkyl), or -N(C<sub>0</sub>-6alkyl)(aryl) substituents, wherein when the carbon atom in -C<sub>0</sub>-6alkyl equals "0" then no alkyl is present; provided that the compound is not

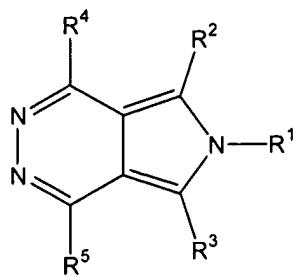
6-methyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4,5,7-tetramethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4,5-trimethyl-6,7-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
5,7-dimethyl-1,4,6-triphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
5-methyl-1,4,6,7-tetraphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4-bis-(4-methoxy-phenyl)-5,7-dimethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4-bis-(4-methoxy-phenyl)-5-methyl-6,7-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4-diethyl-5,7-dimethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4,5,7-tetramethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
*N*-(1,4,5,7-tetramethyl-pyrrolo[3,4-*d*]pyridazin-6-yl)-benzamide,  
1,4,5,7-tetramethyl-pyrrolo[3,4-*d*]pyridazin-6-ylamine picrate,  
1,4,5,7-tetramethyl-pyrrolo[3,4-*d*]pyridazin-6-ylamine,  
5,7-dimethyl-6-phenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
5,7-dimethyl-2-phenacyl-6*H*-pyrrolo[3,4-*d*]pyridazinium bromide,  
2-(2-methoxycarbonylvinyl)-5,7-dimethyl-6*H*-pyrrolo[3,4-*d*]pyridazinium tetrafluoroborate  
5,7-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
5,6,7-trimethyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4-diphenyl-7,8,9,10-tetrahydro-pyridazino[4,5-*a*]indolizine,  
5-methyl-1,4-diphenyl-7,8,9,10-tetrahydro-pyridazino[4,5-*a*]indolizine,  
6-benzyl-1,4-diphenyl-5-p-tolyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
6-benzyl-5-(2-chloro-phenyl)-1,4-diphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4,5,6,7-pentaphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
6,7,10,11-tetraphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*a*]quinoxaline,  
11-(4-nitro-phenyl)-6,7,10-triphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*a*]quinoxaline,  
6-benzyl-1,4,5-triphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
9,12-diphenyl-pyridazino[4',5':3,4]pyrrolo[2,1-*a*]isoquinoline,  
5-methylsulfanyl-1,4,6,7-tetraphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine,  
1,4,6,7-tetraphenyl-6*H*-pyrrolo[3,4-*d*]pyridazine-5-carboxylic acid ethyl ester,  
7,10-diphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-*a*]quinoline,

11,14-diphenyl-pyridazino[4',5':3,4]pyrrolo[1,2-f]phenanthridine,  
1-oxo-7-oxy-6b,11b-dihydro(pyridazino[4',5'-c]pyrrolo)[2,1-c]benzoxazine-  
1,4,  
10-methyl-1,4-diphenyl-8,9-dihydro-7H-benzo(e,f)pyridazino[4,5-  
a]cycl[3.3.2]azine,  
11-methyl-1,4-diphenyl-7,8,9,10-tetrahydrocyclohepta(e,f)pyridazino[4,5-  
a]cycl[3.3.2]azine,  
1,4-dichloro-5,6,7-trimethyl-6H-pyrrolo[3,4-d]pyridazine,  
1-chloro-4-ethoxy-5,6,7-trimethyl-6H-pyrrolo[3,4-d]pyridazine,  
1-chloro-5,6,7-trimethyl-6H-pyrrolo[3,4-d]pyridazinium chloride,  
1-ethoxy-2,5,6,7-tetramethyl-6H-pyrrolo[3,4-d]pyridazinium  
tetrafluoroborate,  
1-ethoxy-5,6,7-trimethyl-2H,6H-pyrrolo[3,4-d]pyridazinium tetrafluoroborate,  
1-ethoxy-3-ethyl-5,6,7-trimethyl-6H-pyrrolo[3,4-d]pyridazinium  
tetrafluoroborate,  
1-ethoxy-5,6,7-trimethyl-6H-pyrrolo[3,4-d]pyridazine,  
5-cyano-1,4-dimethylpyridazino[4,5-a]indolizine,  
1,4-dimethyl-6-phenyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
6-benzoyl-1,4-dimethyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
6-benzyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
1,4,6-trimethyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
5-cyano-1,4-diphenylpyridazino[4,5-a]indolizine,  
6-methyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
6-benzoyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
1,4,6-triphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
5,7-dimethyl-1,4-diphenyl-2,3,8a-triaza-fluorene-9-carbonitrile,  
9,12-diphenyl-pyridazino[4',5':3,4]pyrrolo[2,1-a]isoquinoline-8-carbonitrile,  
dimethyl 3,12,13,17-tetramethyl-7<sup>2</sup>,7<sup>3</sup>-diazabeno[g]porphyrin-2,18-  
dipropionate,  
5,6-dihydro-2,3-dimethoxypyridazino[4',5':3,4]pyrrolo[2,1-a]isochinolin-9-  
ol,  
5,6-dihydro-2,3-dimethoxypyridazino[4',5':3,4]pyrrolo[2,1-a]isochinolin-9-  
ol-hydrochloride,  
3-methyl-6,9-diphenylthiazolo[3',2':1,2]pyrrolo[3,4-d]pyridine, or  
1,4-diphenylpyridazino[4',5':3,4]pyrrolo[2,1-b]benzothiazole; and  
is not selected from the following table:



**Amended Claims possibly to be rejoined:**

1(Currently Amended). A method of binding the  $\alpha_2\delta$  subunit of voltage gated calcium channels comprising a step of administering an effective amount of a compound represented by Formula (I):



(I)

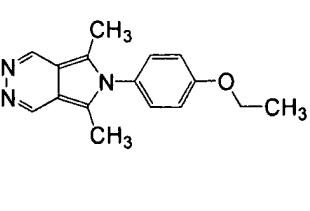
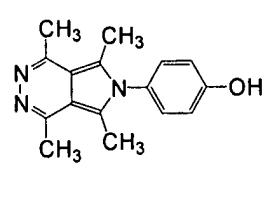
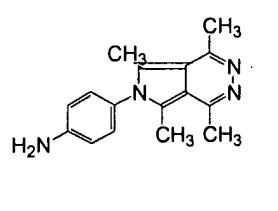
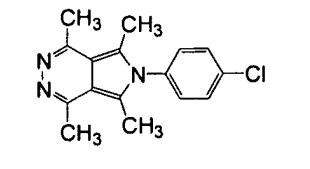
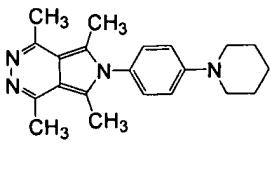
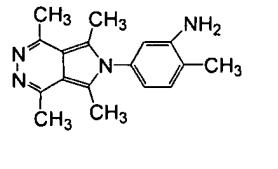
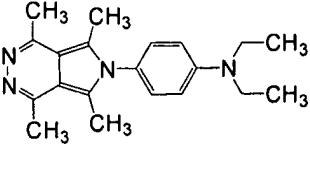
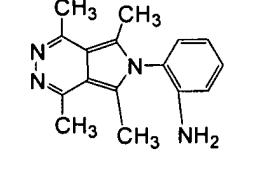
or a pharmaceutically acceptable salt thereof, wherein

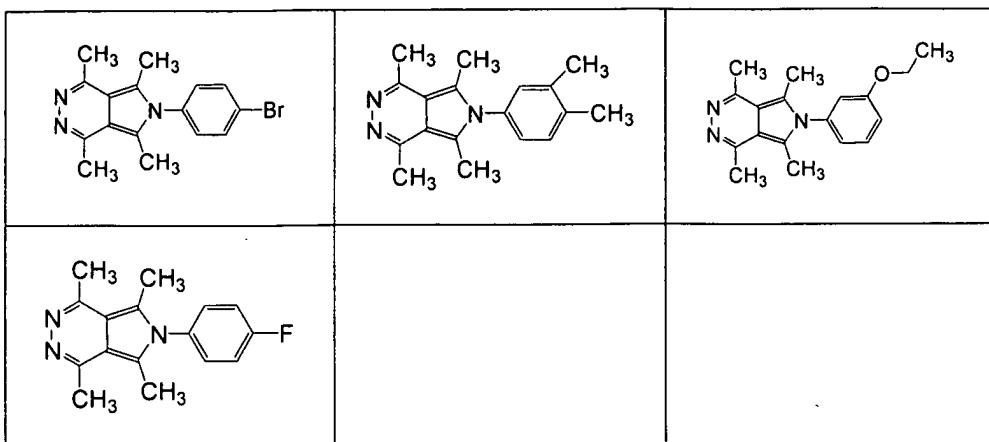
R<sup>1</sup> is -C<sub>0</sub>-6alkyl-aryl, -C<sub>0</sub>-6alkyl-heteroaryl, -C<sub>0</sub>-6alkyl-C<sub>3</sub>-6cycloalkyl, or -C<sub>0</sub>-6alkyl-heteroC<sub>3</sub>-7cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO<sub>2</sub>, -C<sub>1</sub>-6alkyl, -C<sub>0</sub>-6alkyl-C<sub>3</sub>-6cycloalkyl, -C<sub>0</sub>-6alkyl-heteroC<sub>3</sub>-7cycloalkyl, -OR<sup>6</sup>, -NR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -N(-NR<sup>8</sup>R<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -NR<sup>6</sup>COR<sup>7</sup>, -NR<sup>6</sup>CO<sub>2</sub>R<sup>7</sup>, -NR<sup>6</sup>SO<sub>2</sub>R<sup>8</sup>, -NR<sup>6</sup>CONR<sup>7</sup>R<sup>8</sup>, -SR<sup>8</sup>, -SOR<sup>8</sup>, -SO<sub>2</sub>R<sup>8</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, -COR<sup>6</sup>, -CO<sub>2</sub>R<sup>6</sup>, -CONR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)R<sup>7</sup>, or -C(=NOR<sup>6</sup>)R<sup>7</sup> substituents;

R<sup>2</sup>, R<sup>4</sup>, R<sup>3</sup>, and R<sup>5</sup> each independently is -C<sub>0</sub>-6alkyl, -C<sub>0</sub>-6alkyl-aryl, -C<sub>0</sub>-6alkyl-heteroaryl, -C<sub>0</sub>-6alkyl-C<sub>3</sub>-6cycloalkyl, or -C<sub>0</sub>-6alkyl-heteroC<sub>3</sub>-7cycloalkyl, optionally substituted with 1-6 independent halogen, -CN, NO<sub>2</sub>, -C<sub>1</sub>-6alkyl, -OR<sup>6</sup>, -NR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -N(-NR<sup>8</sup>R<sup>6</sup>)NR<sup>7</sup>R<sup>8</sup>, -NR<sup>6</sup>COR<sup>7</sup>, -NR<sup>6</sup>CO<sub>2</sub>R<sup>7</sup>, -NR<sup>6</sup>SO<sub>2</sub>R<sup>8</sup>, -NR<sup>6</sup>CONR<sup>7</sup>R<sup>8</sup>, -SR<sup>8</sup>, -SOR<sup>8</sup>, -SO<sub>2</sub>R<sup>8</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, -COR<sup>6</sup>, -CO<sub>2</sub>R<sup>6</sup>, -CONR<sup>6</sup>R<sup>7</sup>, -C(=NR<sup>6</sup>)R<sup>7</sup>, or -C(=NOR<sup>6</sup>)R<sup>7</sup> substituents; and

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>88</sup> each independently is -C<sub>0</sub>-6alkyl, -C<sub>3</sub>-7cycloalkyl, heteroaryl, or aryl; optionally substituted with 1-5 independent halogen, -CN, -C<sub>1</sub>-6alkyl, -O(C<sub>0</sub>-6alkyl), -O(C<sub>3</sub>-7cycloalkyl), -O(aryl), -N(C<sub>0</sub>-6alkyl)(C<sub>0</sub>-6alkyl), -N(C<sub>0</sub>-6alkyl)(C<sub>3</sub>-7cycloalkyl), or -N(C<sub>0</sub>-6alkyl)(aryl) substituents, wherein when the carbon atom in -C<sub>0</sub>-6alkyl equals "0" then no alkyl is present; and

provided that the compound is not selected from the following table:



2(Currently Amended). The method according to Claim 1, wherein R<sup>1</sup> is – C<sub>0</sub>-6alkyl–aryl.

3(Currently Amended). The method according to Claim 2, wherein R<sup>1</sup> is – C<sub>0</sub>-6alkyl–phenyl.

5(Original). A method of treatment of neuropathic pain comprising a step of administering an effective amount of a pharmaceutical composition comprising: a therapeutically effective amount of the compound according to claim 1, or a pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier.

6(Original). The method according to claim 5, wherein said composition further comprising i) an opiate agonist, ii) an opiate antagonist, iii) an mGluR5 antagonist, iv) a 5HT receptor agonist, v) a 5HT receptor antagonist, vi) a sodium channel antagonist, vii) an NMDA receptor agonist, viii) an NMDA receptor antagonist, ix) a COX-2 selective inhibitor, x) an NK1 antagonist, xi) a non-steroidal anti-inflammatory drug, xii) a GABA-A receptor modulator, xiii) a dopamine agonist, xiv) a dopamine antagonist, xv) a selective serotonin reuptake inhibitor, xvi) a tricyclic antidepressant drug, xvii) a norepinephrine modulator, xviii) L-DOPA, xix) buspirone, xx) a lithium salt, xxi) valproate, xxii) neurontin, xxiii) olanzapine, xxiv) a nicotinic agonist, xxv) a nicotinic antagonist, xxvi) a muscarinic agonist, xxvii) a muscarinic antagonist, xxviii) a selective serotonin and norepinephrine reuptake inhibitor (SSNRI), xxix) a heroin substituting drug, xxx) disulfiram, or xxxi) acamprosate.

7(Original). The method according to claim 6, wherein said heroin substituting drug is methadone, levo-alpha-acetylmethadol, buprenorphine or naltrexone.

8(Currently Amended). A method of treatment or prevention of pain comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

9(Currently Amended). A method of treatment or prevention of a pain disorder wherein said pain disorder is acute pain, persistent pain, chronic pain, inflammatory pain, or neuropathic pain, comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

10(Currently Amended). A method of treatment or prevention of anxiety, depression, bipolar disorder, psychosis, drug withdrawal, tobacco withdrawal, memory loss, cognitive impairment, dementia, Alzheimer's disease, schizophrenia or panic comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

11(Currently Amended). A method of treatment or prevention of disorders of extrapyramidal motor function comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

12(Original). The method of claim 11 wherein said disorder of extrapyramidal motor function is Parkinson's disease, progressive supramuscular palsy, Huntington's disease, Gilles de la Tourette syndrome, or tardive dyskinesia.

13(Currently Amended). A method of treatment or prevention of anxiety disorders comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

14(Original). The method of claim 13 wherein said anxiety disorder is panic attack, agoraphobia or specific phobias, obsessive-compulsive disorders, post-traumatic stress disorder, acute stress disorder, generalized anxiety disorder, eating disorder, substance-induced anxiety disorder, or nonspecified anxiety disorder.

15(Currently Amended). A method of treatment or prevention of neuropathic pain comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

16(Currently Amended). A method of treatment or prevention of Parkinson's Disease comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

17(Currently Amended). A method of treatment or prevention of depression comprising the step of administering a therapeutically effective amount, or a prophylactically

effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

18(Currently Amended). A method of treatment ~~or prevention~~ of epilepsy comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

19(Currently Amended). A method of treatment ~~or prevention~~ of inflammatory pain comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

20(Currently Amended). A method of treatment ~~or prevention~~ of cognitive dysfunction comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

21(Currently Amended). A method of treatment ~~or prevention~~ of drug addiction, drug abuse and drug withdrawal comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

22(Currently Amended). A method of treatment ~~or prevention~~ of bipolar disorders comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

23(Currently Amended). A method of treatment ~~or prevention~~ of circadian rhythm and sleep disorders comprising the step of administering a therapeutically effective amount, or a prophylactically effective amount, of the compound according to claim 1 or a pharmaceutically acceptable salt thereof.

24(Original). The method of Claim 23 wherein the circadian rhythm and sleep disorders are shift-work induced sleep disorder or jet-lag.